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JOURNAL OF

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CUTANEOUS MEDICINE

AND

DISEASES OF THE SKIN.

A QUARTERLY RECORD OF

DERMATOLOGICAL SCIENCE.

EDITED BY

HENRY SAMUEL PURDON,

L.R.C.P. & L.R.C.S.I.,

PHYSICIAN AND LECTURER ON CLINICAL MEDICINE, BELFAST GENERAL HOSPITAL;

PHYSICIAN TO THE HOSPITAL FOR DISEASES OF THE SKIN;

MEMBER ULSTER MEDICAL SOCIETY, ETC.

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PREFACE.

WE have now completed our Fourth Volume—which however, as far as bulk is concerned, contains a fewer number of pages than any of the former volumes. This arrangement is necessitated by the reduction in price of our publication, the annual subscription to which has been lowered to 8/-, a sum that brings the Journal of Cutaneous Medicine within the reach of all. Its expense can form no plea against subscribing; and we are sure that the practical character of the articles on cutaneous medicine exhibited in our "Original Communications," must make it welcome to all who are interested in this department of medical science. Our reviews have been concise, and to the point. In the "Clinical Record" will be found abstracts of cases possessing points of peculiar interest, both in the pathology and treatment of skin diseases. Each subject broached in that part of the Journal devoted to notes and comments by the Editor, will be found, it is believed, to be of some importance, and the suggestions offered it is hoped may be found of practical application. In our "Miscellaneous Memoranda," there are contained extracts from the principal home and foreign Medical Journals, not only on the subject of cutaneous diseases, but also on points of general interest to the medical practitioner.

We have sent regularly copies of the Journal addressed to the Editor of nearly every medical paper, whether published weekly, monthly, quarterly, or annually. We regret, however, in being obliged to state that all have not exchanged with us. There is another matter upon which we feel a little "sore," viz., the limited support afforded us during the past year. We certainly did not expect to have the same amount of patronage bestowed upon the Journal as it possessed under the Editorship of Professor Erasmus Wilson, but we did hope that the

important subjects advocated and advanced by this periodical would have excited a little more interest in professional circles than they have done. Germany, France, Italy, and America, each possess a Dermatological Journal ably supported,—why not Great Britain?

The advancement of cutaneous medicine—and, consequently, the benefit of suffering humanity—has been our chief aim and object. If the pecuniary support had been greater, we intended, we may add, to give with each number photographs, or woodcuts, &c., to illustrate our cases. We trust that the future will see us in a more prosperous condition, and that we shall not be obliged to draw our labours to a close for want of adequate support. Our hopes on this head are sanguine. The Journal is still young; the important department of medicine it advances and upholds is only beginning to be recognised; a small, but energetic, band of workers contribute to our pages; and we hope to be permitted to begin our new volume with such assistance as will make it succeed.

"In the lexicon of youth, which Fate reserves
For a bright future, there is no such word as fail."

For ourselves, we have always kept before us the fact, that, to be a successful Dermatologist, one must also be a thorough physician and surgeon: not a mere "specialist," but a specialist in a higher sense of the term. This object can only be accomplished after years of constant and steady application.

As to our authority for taking the Editorial chair during the past year, we can only refer to the opinions expressed by others, and especially by the late Editor, Professor Erasmus Wilson. As to our capacity and experience for such a task, the work of the past year will speak for itself. Our future efforts (if encouraged and supported to continue the Journal) will be no less zealous than during the past; and fuller and increasing experience will give, we hope, additional importance to our labours.

With this expectation, we leave the prospects of the new volume in the hands of those who are interested in the progress of Dermatology in these kingdoms.

5, College Square East,
Belfast,
1st March, 1871.

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JOURNAL OF CUTANEOUS MEDICINE,

AND

DISEASES OF THE SKIN.

CLINICAL NOTES OF SKIN DISEASE.

By Erasmus Wilson, F.R.S., F.R.C.S., Professor of Dermatology in the Royal College of Surgeons, England.

Anæsthetic Properties of Carbolic Acid.

In the year 1868, I was consulted by a military officer, aged forty-four, for hypertrophy of the epithelium of the glans penis, and neighbouring fold of the prepuce. The end of the penis was perfectly flat; it had the appearance of being truncated and spread out; the most shallow groove separated the flattened glans from the broad, round border of the prepuce, and the whole of the flattened surface was coated over with a thick, horny, and in some places, warty layer of epithelium of extreme density and considerable thickness. The covering of the glans resembled a layer of horn, and partially constricted the meatus urinarius; that of the prepuce was like the structure of an old but very prominent wart, and bore evidence of being the product of elongated, as well as of enlarged, papillæ.

The history of the case was as follows:—The patient had been the subject of herpes præputialis, repeated, as is usual with that complaint, periodically; he was also, when these attacks took place, tormented with phymosis; and his surgeon, to remove the phymosis, performed the operation of circumcision. This happened in 1861, seven years previously to his coming under my care; and from the period of the operation up to the present time, irritation of the part had continued to prevail; the papillæ of the glans and inner surface of the stump of the prepuce had increased in size, and a thickening and condensation of the epithelium was the result. He had made many efforts to obtain a cure, and was almost in despair.

I proposed to him to remove the horny layer and obliterate the hypertrophous papillæ by means of a solution of equal parts of potassa fusa and water, and this I have succeeded in accomplishing almost completely. The application of the caustic was excessively painful, so that only a small portion of the growth could be operated on at a time; and at the end of a few days there was so much inflammation that it became imperative to desist for a week or more before resuming the use of the remedy. This circumstance, and the necessary pursuit of his military duties, have protracted the cure for nearly two years; but during that period he has been making sure, although slow progress, and bit by bit the extent of the disease has been diminished.

In the course of the treatment, I endeavoured to persuade him to apply the caustic himself, and supplied him with the material; but the attempt failed in consequence of the excruciating pain caused by its application. It was evident that some share of this extreme sensitiveness was due to the sensibility of the organ. and not a little to irritability induced by prolonged inflammation. This was our position one day recently: I had denuded the base of a large portion of the hypertrophous growth; but another application was necessary to reach the papillæ; and the patient's power of supporting further pain was exhausted. There were reasons why chloroform could not be employed; local anæsthesia had, possibly from mismanagement, complicated the difficulty, and I was beginning to feel a little puzzled for the means of attaining my object, when it occurred to me to attempt to conquer the morbid irritability of the part by means of carbolic acid. It may be premised that in consequence of this dread of pain, I had left the application of the caustic to the patient himself, merely encouraging him to proceed, and pointing out the spots which he should principally attack; and when I suggested, after some minutes of agony, that he should touch the raw surface with carbolic acid, he shrunk from the proposal, having on several occasions used it before, and found it very painful. Nevertheless, the occasion was pressing, and he brushed the surface with carbolic acid, and was gratified by finding that he could do so without suffering. The carbolic acid exercised its usual effect of coagulating the albumen of the surface, and producing a white film; and after repeated applications the film had reached a considerable thickness. Now was the time for the renewal of the original caustic, and after some hesitation it was

applied; but to the patient's astonishment and my own satisfaction with an almost painless result. The caustic which a few minutes before was utterly unendurable, could be used now, and with perfect freedom—almost without inconvenience. We followed up our discovery, and left very little of the surface for future operation.

This anæsthetic property of carbolic acid was not altogether new to me: but I had never before seen its power so strikingly manifested. I have used it often since, and always with the most satisfactory result; and I employ it at present, very commonly, previously to the application of caustic to lupus and epithelioma. It benumbs the surface, it dulls the excessive sensibility of the superficial nerves, and it thereby permits the caustic action of our remedies, with a great reduction in the amount of pain. It admits, I have no doubt, of more extensive application, and will, I have reason to believe, come into general use for a similar purpose.

Congestion, Hypertrophy, and Ulceration consequent on the division of a nerve. Deficient vital power may be regarded as the equivalent of deficient nerve-power; and the consequences of deficient nerve-power will be suspended or perverted function; there may be loss of sensation, dilatation of capillaries, congestion of vessels, infiltration of tissues, hypertrophy or atrophy of cell-structures, ulceration, and even mortification. I have noted and observed these changes where the nervous system has been feeble, or where the nerve of a part has been in a similar state; but the following case illustrates the subject more vividly.

A young man, aged nineteen, received a severe cut on the wrist from a broken bottle; he lost a good deal of blood, and from the numbness of the thumb and two first fingers, it was apparent that the median nerve was severely injured, probably divided more or less completely. The wound healed in a month or six weeks. It is now three months from the accident, and his application to me had reference to a superficial ulceration near the tip of the index finger, and some deep chaps or rhagades around the last joint of the same finger and the similar joint of the middle finger. The thumb and two neighbouring fingers, with the corresponding part of the hand are still numb; they are swollen and stiff, and the cuticle is thickened and indurated. There is a small puckered cicatrix on the pulp of the thumb; but the finger most gravely affected is the index; it is enlarged

to double its normal size, the skin of the two last two joints being red and distended. It is stiff and flexed at the end, and looks as if it were shortened in length. Near the tip of the finger is a small, superficial ulceration, oozing a semi-purulent fluid, and looking as if it communicated with the extremity of the phalanx, and a little distance below is the cicatrix of a similar ulceration, covered with a dense and horny layer of puckered cuticle. All the three fingers are in a state of congestion, but more particularly the index, and he complains of a deep-seated pain, which he attributes to the bone.

The swelling and congestion of the fingers were not so great near the period of the accident as they have been since; and they have become aggravated during the last three weeks, partly by manual labour and partly by the coldness of the temperature. With regard to the pathological state of the fingers there cannot, I apprehend, be a doubt that all the symptoms named, for example, anæsthesia, congestion, swelling, chapping or fission of the skin, and ulceration, are due to the one primary cause—subtraction of nerve-power. In furtherance of this diagnosis, I prescribed inunction of the skin with the benzoated ointment of zinc, a properly-adjusted bandage to the index finger, and warmth, with the exclusion of the atmosphere as far as practicable to the whole. A pale sclerotic and tongue, with feeble beat of the pulse, were suggestive also of the administration of the citrate of quinine and iron.

Chlorate of Potass in Chronic Ulcer. In the year 1866, a man, aged forty-nine, showed me some small ulcers upon one of his legs, which had been in existence for two years. They were six or eight in number, and the intervening skin was red and irritable from the presence of ekzema squamosum, probably induced by the use of poultices. The ulcers were deep, perforating the whole thickness of the corium, without granulations, and moistened with a colourless exudation. From the appearance of the sores, I was led to the belief that they were syphilitic, although I could obtain no satisfactory syphilitic history from the patient. Nevertheless, there were the ulcers, of two years' standing, a great incumbrance to the patient, and he wanted to have them cured. I satisfied myself that they were no consequence of varicose disease, and no other explanation was apparent to me than the one I have named. His general health was moderately good; he was a little pale and flabby, the conjunctivæ

were white, and there were obvious indications of a cachectic tendency.

My patient lived in the country, and this must serve as an explanation of the fact of the long interval between his visits, indeed he was generally relieved temporarily by the treatment I adopted, and as long as he remained moderately easy he delayed a journey to town, and only made it when impelled by necessity. Thus, although he may be said to have been nearly four years under my care, I have only seen him eleven times. On his first visit in June, 1866, impressed with the belief that the hidden cause of the disease was syphilitic cachexia, I prescribed five grains of iodide of potassium, with a drachm of fluid extract of sarsaparilla, twice in the day; one grain of the protioduret of mercury, with three of extract of conium at bedtime; and an ointment of oxide of zinc with carbolic acid, ten minims to the ounce.

In the same month of the following year (1867) he paid me a second visit. He had improved under the treatment I had prescribed at the time, but had now fallen back into his former state. This time I ordered for him nitro-muriatic acid with gentian internally, and the unguentum resinæ to dress the sores; but at the end of six weeks was obliged to resort again to the iodide of potassium; and at the latter end of November, put him through a regular course of the iodide of potassium, namely, increasing in dose every ten days, beginning with five grains twice a-day, and rising upwards to seven grains and a-half three times a-day; moreover, the unguentum resinæ did not agree satisfactorily with the sores, and the oxide of zinc ointment with carbolic acid was resumed.

In 1868, he returned to me early in the year with the sores still unhealed; he thought the ointment irritated the skin, and I substituted camphor for carbolic acid in the zinc ointment, and prescribed for him five grains of citrate of iron and quinine, twice daily. But in April, I again felt the necessity of resorting to the iodide of potassium. In September he pointed out to me four tubercles, apparently syphilomata, situated around the ankle; and as I was growing discontented with the powerlessness of the iodide, I gave him the perchloride of mercury with bark. But the perchloride seemed to have as little permanent influence as the previous remedy; and in November I again fell back upon a graduated course of the iodide of potassium.

It was observable that the longest intervals of benefit always followed the graduated course of iodide of potassium; that for a while it could be depended upon, but that sooner or later all the old symptoms returned. Thus at his last visit in November I put him under a course of iodide of potassium, and he found no necessity for returning to me until August, 1869. He then informed me that the ulcers had healed over under the iodine course, and had remained healed for several months; but that they had now broken out afresh. And in this instance, as he had been taking the iodide so recently, I had recourse to the solution of the perchloride of mercury with cinchona.

I had now come to consider my patient's case as one of some difficulty and no ordinary obstinacy; and, therefore, when he presented himself to me some two months later, in no degree improved, but rather worse than usual, I determined to vary my method of treatment and try the effect of the chlorate of potass, instead of the iodide of potassium. I had previously found the chlorate of potass valuable in other obstinate cases originating in syphilitic cachexia, and I had employed it also in cancerous cachexia with benefit; and the case before us seemed well adapted to test its capabilities. In the early part of November, 1869, therefore, I prescribed ten grains of the chlorate of potass twice daily; with the application to the ulcers, once in the day, of a solution of chlorate of potass in glycerine, of the strength of one drachm to the ounce. Four months later, namely, on the last day of February, 1870, he again paid me a visit; this time, evidently, very much improved in health, and in good spirits: the leg, he said, was sound, and he felt better than he had ever done before. He stated that the local action of the chlorate of potass was very remarkable; he could see a change for the better every time he used it; that the foul appearance of the sore rapidly vanished, and that it filled up with firm granulations. At one time, he said, he had nine ulcers upon the leg, the largest about an inch in diameter, and all circular in figure, but they were now completely healed, and more solidly than had been the case before. After five years of experience in this troublesome malady the opinion of the patient was not without its value; and he stated that the last treatment had produced a more decidedly favourable effect both on the sores and on his health in general, than any other he had undergone.

Recurrent Herpes. There are two striking differences of character in herpes; the one is that the eruption, as a general rule, is never repeated; the other is, that it recurs frequently. These extremes of difference, regarding the disease as a neurosis, appear to me to be due to the part or extent of the nerve implicated, and have induced me to group the various forms of herpes into such as are consequent on a morbid state of the trunk of the nerve, and such as are consequent on a morbid state of its peripheral branches. Herpes zoster is an example of an affection of the trunk of a nerve; and herpes labialis, progenitalis, &c., of its peripheral branches; and it is far from difficult to conceive that a mere temporary condition of the surface, or an emotional cause, may determine the one, while a deeply penetrating or deepseated cause may be necessary for the development of the other. Some degree of light may be thrown upon the subject by the narration of the following case:-

A little boy, aged five years, was brought to me in March, 1868, with a small patch of herpes on the left cheek, apparently the manifestation of a state of irritation of a branch of the superior maxillary nerve. The patch was single, about one inch in diameter, brightly red, and dotted over with a cluster of imperfectly-developed vesicles, which ended, after a few days, in small, yellow scabs. The symptoms accompanying the eruption were itching, heat, and a little smarting, and the whole duration of the affection was five days. I prescribed for him the syrup of phosphate of iron, and ordered that the eruption should be dusted over with a powder of oxide of zinc, calamine, and starch, with a little camphor.

In February, 1870, the little fellow was brought to me a second time, with two patches instead of one, but of perfectly identical appearance and nature, and on the same cheek; one being situated on the zygoma, the other near the angle of the mouth, and both within the region of distribution of the superior maxillary nerve. The eruption first appeared on Tuesday; he was brought to me on the Wednesday, and two days later the patches were fading and disappearing.

But the interesting feature of the case was the medical history of the child. For two years he had been the subject of a repetition of a similar eruption on the same cheek, every two or three months; appearing in the same way, disappearing quickly, and giving rise to scarcely any inconvenience; and he was brought to

me, not on account of any suffering attending the disorder, but with the hope that I might suggest a means of preventing the continual recurrence of the affection. On inquiring carefully into the habits of the child, with the view to discover a possible cause for the morbid phenomenon, I ascertained that he was remarkably excitable, and that when crossed he would suddenly give way to violent fits of passion; such an occurrence had happened on Sunday night, somewhere about forty hours before the appearance of the eruption, and his mother had previously noticed that other attacks had followed upon these violent fits of nervous excitement. There was no other cause detectible, and I am therefore led to the conclusion that in this instance the cause of the herpes was an emotional stimulus of the brain communicated to the peripheral extremity of certain filaments of one of the divisions of the fifth pair of nerves.

In herpes præputialis it has been surmised that some specific cause might probably be present, but this explanation would be groundless in the similarly fleeting forms of herpes that occur upon the face. Herpes from irritation of the peripheral nerve plexuses of the skin—is not only remarkable for its tendency to recur at intervals, but also for the small extent of the cutaneous inflammation, and furthermore for the absence of a rigorous respect of the middle line. A gentleman now before me has a patch of herpes on the middle line of the forehead at the root of the nose. The patch is no bigger than a fourpenny piece, but it encroaches pretty equally on both sides; and I have frequently observed that, in a case of herpes zoster, there has been an intrusion of the eruption beyond the middle line, apparently due to intercommunication of the peripheral nerve-plexuses. Near the extremity of the eyebrow of the same gentleman is a small encrusted patch of herpes, now a week old,—that at the root of the nose having appeared within twenty-four hours. Then there is the stain of a previous patch of herpes at the inner extremity of the same eyebrow, and two similar stains on the nose near the middle line. But all these patches have appeared separately, chiefly on the right side of the face, and their average duration has been ten days.

He tells me that he has been tormented with this little annoyance for seven years, and that it recurs pretty regularly six times in the year. The appearance of two patches within the limit of a week had somewhat alarmed him; and that it was

which had brought him to me. I found him somewhat debilitated, with a pale tongue and pale conjunctiva; he had been a good deal overworked for some time past, and stood in need of the remedy which I prescribed for him, namely, citrate of iron and quinine. There was no apparent explanation of the selection by the morbid process of the right side of the face.

ON THE TREATMENT OF SCROFULO-DERMA.

By J. L. Milton, Surgeon to St. John's Hospital for Diseases of the Skin.

BY Scrofulo-derma, I mean scrofulous ulceration of the skin, wherever it may be seated, and under whatever form it may appear. The word itself is not, perhaps, constructed very accurately, but it is as good as any I have met with, and will do I hope till a better one has been invented. It serves also to keep the attention fixed on the fact that there is disease of the skin, to the scrofulous ulceration of which organ I of course propose to limit the few observations I have to make.

I will not attempt to waste the reader's time by describing the symptoms; the perpetually recurring and obstinate swelling of the lymphatic glands below the chin, the subsequent slow ulceration, the thin, unhealthy discharge, the protracted cicatrization, followed by puckered disfiguring scars, are familiar to every person who has noticed the disease at all; it is, therefore, unnecessary to point out the diagnostic marks, more especially as I know of no other disease with which it can be confounded, unless, indeed, it be by some mischance mistaken for syphilitic ulceration of the skin, an error which the history of the case, and the age and look of the patient should at once rectify; or lupus non-exedens, or erythematosus, which it often precedes, but from which it may be easily distinguished. My object is simply to make a few practical remarks upon the treatment of this refractory disorder.

I believe I have now tried pretty nearly every remedy yet recommended for scrofulo-derma in such a way as to lead one to think that the author who recommended it had any faith in the medicine itself; for, as I have often remarked in my writings, it is sometimes extremely difficult to decide on this point; as, while

we are pretty certain to meet with a long array of remedies, we seldom, indeed, find anything like definite information. We are told that one remedy is "suitable," another "applicable," and a third "often beneficial;" but we are not usually told what the exact powers of any one remedy are. It is only too rarely that we find a man content to toil on like Lugol in this path.

Among the remedies given for this complaint we find, first of all, tonics, such as cinchona and other bitters; all the mineral acids, iron, cod-liver and other oils, strengthening food containing a good deal of meat, jellies, and stimulants, such as wine, stout, ale, &c. The choice, I believe, is restricted to these, for the simple reason that it is impossible to carry it further. Were new tonics discovered, it might be safely predicted that they, too, would be tried in turn, and that in due time we should hear they also were suitable, applicable, beneficial, and so-on. Similarly, were any new and undreamed-of form of diet found out, it would be at once pressed into the service. Again, we are sure to find iodine, or some of its compounds, recommended; and lastly, there is pretty sure to be one, if not more, new powerful drugs, such as bromide of potassium, iodide of ammonium, &c.; or the author relieves his mind of an irrepressible load of scientific knowledge, and explodes in the shape of some variety of a new theory about heat or food; as, for instance, restoring to the body the phosphates it has lost, on the principle laid down by Liebig, that scientific manuring consists in returning to the ground the substances taken up by plants.

Now, I can safely say that I never saw the slightest permanent benefit result from the use of any of these remedies, or any combination of them. I have given them in all sorts of forms and doses, and I now unhesitatingly say that I believe they are, with very few exceptions, worse than useless. Sometimes when the appetite is bad a little mineral acid and bitter infusion may be of service, but as to these improving the character of the ulceration, or checking the tendency to a fresh outbreak, it would be idle to expect such results, as they do not occur. Moreover, these remedies, especially when quinine and cinchona are employed, very often disturb the digestion, produce headache, nausea, and intolerable repugnance for them. We are told that in anemia steel is useful; but in the first place, I believe that what is called anemia here is a very different process from true anemia, as we see it in chlorosis for instance: in the second place, I am dis-

posed to think that the statements about the beneficial effects of steel here, have arisen from a belief in its virtues, not from the observation of results. I say this quite advisedly; because after a long course of steel, I have, over and over again, either seen no change at all in what is called the anæmia, or a very slight and transitory improvement,—certainly nothing that could in any way compensate the patient for taking so much medicine. Large quantities of animal food, jellies, stout, port wine, and such things proved useless or injurious, more generally the latter. Cod-liver oil, given with tonics, never did any good at all. Iodine, and all its compounds, proved in small doses inert, and in large ones hurtful. As to Lugol's method of giving it, I submit, although I am at the same time glad to pay a just tribute to his genius and industry, that his system is so utterly impracticable that it could not be effectually carried out once in a hundred times. With respect to the value of such remedies as iodide of ammonium I know nothing, and therefore do not propose to say anything about them.

As scrofulo-derma tends almost certainly to get well of itself sooner or later, it is easy to understand how it happens that it also gets well under treatment of every kind. But if this be the real explanation of the disparity between the results which I have seen, and those which must have been seen by those gentlemen who have noticed such a very different state of matters, then a stronger proof could hardly have been found of the necessity for reforming our system of observation, seeing that the progress of a disease, under the influence of remedies really capable of curing, or even affecting it, is a widely different process from such hit-or-miss work as an occasional coincidence of events.

The only remedies from which I have ever seen the slightest benefit in scrofulo-derma, are purgatives, and from the use of these I have often witnessed the best results,—not that I mean to extol them as a certain means of cure, but because the judicious employment of them rarely fails to do some good, and in a great many instances brings about a rapid and permanent closing of the ulcerations, with an unmistakable improvement of the health. Several surgeons who have noticed these facts at St. John's Hospital, have expressed their wonder at the rapidity with which amelioration followed the use of these remedies. Sometime ago two medical gentlemen from America, Dr. Cherry and Dr. Jones, did me the honour of calling occasionally to see my method of

treatment. They were much interested in this disease, and frankly admitted how very unsatisfactory the results of ordinary treatment had proved in their hands. Fortunately, I had at almost their first visit an opportunity of showing them three cases very well calculated to demonstrate the value of purgatives. One was that of a girl who had been treated in this way four or five years previously for extensive scrofulous ulceration under the chin; it had rapidly healed up under those remedies, and she had remained well ever since. The second case was that of a lad with extensive strumous ulceration of the back of the right hand; he had been under treatment about three or four weeks. and already a portion of the sore had healed. The boy's mother stated in the presence of these gentlemen that hitherto the ulcer had continuously enlarged, although he had for years past been always treated at some institution or other. The third case was that of a poor child suffering from open ulcers under the chin. and who bore sad traces on her left arm and leg of former ravages made by this fell disease. She had not attended previously at St. John's, but had been long under treatment elsewhere. These gentlemen saw both the latter cases again, and I believe went away quite satisfied of one fact, namely, that the treatment had done a remarkable amount of good in a very short space of time. Should these remarks reach them, I shall be glad if they will communicate their own experience on the subject.

What are the best purgatives I am not prepared to say. The subject requires, to my thinking, far too full and prolonged an investigation to admit of its being decided out of hand by any one person. So far, I have always done the most good with those which contained mercury given over night, and salines taken in the morning. One thing seems absolutely necessary, and that is, that they should be taken to the extent of inducing tolerably free purging, and that they should be continued for a long time. In this fact lies, I suspect, the secret of some of the cures effected by quack medicines,—for cures there have been beyond all doubt. The acid solution of iron, used at St. John's Hospital,* may be given after the salines and mercury have been employed for some time; a child of five or six years of age will bear very well from four to six minims three times a-day in a large wineglassful of water. The use of this remedy should,

^{*} See Journal of Cutaneous Medicine, vol. iii. p. 371.

however, not interfere with the occasional use of the purgatives, which ought to be given quite twice a week till the sores are closed. How this medicine acts I have no idea, but as it arrests the secretion of serum in eczema when other tonics fail to do so, I presume its operation is not that of a tonic in either case. During cold weather, and while purgatives are being taken, De Jongh's cod-liver oil may be given, especially when the patient is underfed; but with every prejudice in its favour, I have not been able to satisfy myself that this admirable preparation is useful or necessary here, and I at once admit that my observations are very imperfect on this head.

The most valuable topical application in scrofulo-derma is, according to my experience, the acid nitrate of mercury. The method of using it is this: a piece of lint is rolled up into a firm ball the size of a small pea, and then tied to a butcher's skewer; this is dipped into the acid, and applied to a small part of the surface. A basin of water should be at hand, and immediately anything like severe smarting begins, the part should, if possible, be plunged into it; if that be impracticable, it should be freely bathed with the water. After this the ulcer simply requires to be covered with clean, soft cotton wool, kept firmly on by means of a binder till the next day, when it is removed by simply steeping in hot water, and the acid is re-applied. All ointments, lotions, fomentations, except occasionally with very hot water when there is tenderness or swelling of the glands, poultices, heating impermeable dressing, like oiled silk, spongio-piline, &c., are to my thinking, worse than useless; inasmuch as, while they do no good, they are respectively so many additional sources of expense, trouble, and filth. The diet cannot, I believe, be too plain and simple. Plenty of good brown bread and milk, which can now fortunately be procured as pure in London as in the country, a very moderate amount of light meat, fat ham or bacon daily, well-boiled vegetables, red wine in moderation, and a fair amount of fruit will, unless I have deceived myself, do all that diet can do. Such patients should be as much in the open air as possible, without being exposed to more fatigue than necessary. For those who must toil to live, the lightest work that can be procured should be selected. As to bathing, a hot bath once or twice a-week, for four or five minutes, will do all that the most elaborate system can effect. For general washing, only very hot

water should be employed. Mineral baths and waters of every variety to which credulity has ever yet opened its ears, are here, as in ninety-nine instances out of a hundred, as useless as charms and spells. Change of air is often beneficial, but to a much less extent than it is believed to be. The disease, when it gets well, generally does so as quickly in London as in the healthiest part of the kingdom, and is, perhaps, as obstinate, and occurs as frequently among the population of our finest rural districts and sea coasts, as in the crowded allies of the metropolis. Where the laws of health, sense, and cleanliness are violated, there scrofulo-derma will appear.

In conclusion, I have to observe that, although I distinctly say that the remedies I have now recommended often act very beneficially and rapidly, whereas those ordinarily used seemed to me perfectly inert or hurtful, I yet do not wish for one moment to convey the opinion that I would put them forward as a certain, or even reliable, means of coping with such an obstinate disease as scrofulo-derma. I merely say that the system now sketched out appears to me the simplest and best I have seen, and that what it cannot effect cannot be attained by means of any treatment I ever heard of.

THE MANAGEMENT OF SOME CUTANEOUS DISEASES OF THE LOWER LIMBS.

By John Kent Spender, M.D., Lond. Surgeon to the Mineral Water Hospital and to the Eastern Dispensary, Bath.

CUTANEOUS diseases of the lower limbs are either (a) a fragment of a larger trouble spread over more or less of the entire body, or (b) they are the outcome of a local lesion, and express with some preciseness the extent and severity of that lesion. In the former case, the therapeutics of a part are merged in the therapeutics of the whole, and one skin-area is not thought of more than another, except so far as may concern the convenient use of external applications. In the latter case, the local lesion stands to the cutaneous disease in a causal relation, either producing it or aggravating it, and requiring distinct and specific attention before its effects can be permanently removed.

Again, it is possible that a third class of cases could be generalised, in which a constitution affection, exhibited on a particular part, may be made worse by a local vice or weakness which is susceptible of more or less control, but which is pro tanto a hindrance to the action of purely constitutional remedies.

But it is by no means uncommon to see examples of skindisease of the lower limbs in which the relative agency of different causes is far from clear, and in which a combined system of treatment fulfils our most hopeful expectations.

I venture to put together a few clinical illustrations of a rational therapeutics, pursued according to this plan. My illustrations will mostly include common diseases; some having a constitutional or diathetic importance, and others claiming notice because they signify that local measures (medical or surgical) must occupy the first place.

Every practitioner will recognise Erythema nodosum, although it may be difficult to state anything definite about its nature and origin—whether it be an exanthem or a neurosis. And though it comes to an end "spontaneously," and leaves behind "no ill effects," it does not follow, as Hebra seems to suggest, that treatment is unnecessary or superfluous. It may be safely asserted that the constitutional affinities of the disease indicate what may and ought to be done. Internally, I combine sulphate of iron with a dilute mineral acid and very mild saline purgatives.

Magnes: Sulphat: gr. xx.

Ferri Sulph: gr. iiss.

Acid: Sulph: dil: mv.

Tr: Aurant: m. xv.

Aquæ puræ 3i., ft. haust. ter die sumend.

This may be given to an adult woman, and a mild aloetic pill, now and then, may be necessary also. Pure neurotic remedies, like quinine or strychnine, do little good by themselves; but they may assist the hæmatic powers of iron, and arsenic may favourably influence the vaso-motor nerves.

In nearly every case I support the limb with a Domette flannel bandage, which may be applied with considerable pressure. Domette flannel is a material which makes an excellent bandage; it is yielding and elastic, and yet almost any degree of compression can be exercised with it. The calorific properties of flannel are useful, too, as nearly all erythematous legs are below the normal temperature. Every third or fourth day the bandage is removed, and the limb may then be shampooed with a lather of soap and hot water. Sea-bathing is highly to be recommended.

Erythema tuberculatum and Erythema papulatum are merely small patches of E. nodosum, and are most common on the back of the leg. The clammy purple legs of young women suffering from chlorosis, improve wonderfully under the stimuli of the warmth and pressure of a Domette flannel bandage. This condition of the lower limb is not true erythema, but is more allied to passive congestion, or chilblain.

The neurological affinities of erythema are shown (a) by its tendency to recur, and (b) by its frequent association with rheumatism (E. circinnatum); but there is much yet to be learnt about this disease.

Eczema assumes many forms on the lower limbs. Ascribing its origin to "perverted innervation," according to the most recent doctrines, this multiform aspect of eczema is easily to be explained; and the constitutional context of the disease will often correctly indicate its probable species.

In this place, however, I have to discuss not what eczema is, but how it is to be treated. When the vesicles of eczema burst, thin scabs cover the inflamed patches: the scabs are composed of "epithelium and the fixed constituents of the fluid of the vesicles" (Sir W. Jenner). Now, I accept this scabbing as a natural method of cure, and I try to assist nature accordingly. scabs or scales ought not to be disturbed; they protect the hyperæmic inflammatory cutis, and wait until it is covered by healthy cuticle. Eczema simplex exhibits the so-called eczematous condition in its type-form: it can scarcely be confounded with anything else. A middle-aged, healthy man, a farmer, consulted me for two long transverse patches of E. simplex on the front of the leg and instep: the general health seemed good. The patches were washed with a solution of nitrate of silver (20 grains of the salt to the ounce of distilled water); they were then covered with chalk and benzoated zinc ointment, spread thickly upon soft lint; and a Domette flannel bandage was applied over all. The dressings were renewed on alternate days, and five drops of liquor arsenicalis were administered in water every six hours. There was an immediate relief from pain and worry, and a complete cure was effected in a very short time. It is worthy

of remark, that the nitrate of silver solution supplies a *chemical* scabbing, which is an aid to the crust formed out of the ointment and the epithelial scales.

Eczema rubrum has a distinct hyperæmic or quasi-inflammatory basis, and is frequently connected with varicose veins. There is often much ædema of the sub-cutaneous structures at the same time; a local anasarca which seems to proceed, at least in part, from cutaneous irritation. A large tract of skin may be hot and red, thin serum steaming out at every pore, and almost "scalding" the adjacent integument over which it flows. Most of the scales or scabs are washed away by the abundance of alkaline serosity, but the remains of some may be generally detected at the edge of the inflamed surface. No species of eczema goes so satisfactorily to prove that this is essentially a perverted nutrition of the skin structure.

I have already published a method of treating Eczema rubrum, which I have found very successful. I take some common black wash (lotio hydrargyri nigra of the Ph. B), mix with it a tenth or twelfth part of glycerine by measure, and let it be well shaken. A small quantity of this mixture being poured into a wide, shallow vessel (as a saucer), strips of linen are soaked in it, and, after being lightly squeezed, are placed evenly and smoothly round the affected part of the limb, a portion of the black oxide of mercury adhering to the linen. A bandage secures the dressing in its place, and the work is done. The dressing should be renewed morning and evening; an impervious covering should on no account be put over it, as the pent-up secretion would decompose, and possibly inoculate a fresh area of sound skin; and the dry linen strips can always be easily removed by being first well saturated with warm water.

In certain cases, the cure of *E. rubrum* may be facilitated by brushing the red, moist surface with a solution of nitrate of silver, before the dressing of "black wash" is applied.

Arsenic should never be prescribed for internal use during the early stage of this disease; an effervescing saline draught is a pleasant form of "febrifuge" medicine, and a strong, saline purgative is often necessary. The diet should be nourishing, without stimulation.

The sub-acute variety of *E. rubrum*, in which the amount of fluid is so small, that it dries into thin crusts (resembling, at a hasty glance, psoriasis), is treated with great advantage by the

administration of arsenic, and by the external use of tar. The therapeutic agency of tar has scarcely been fully recognised, owing, probably, to the fact, that it is commonly applied in too strong a form. It is unfortunate that the British Pharmacopæia offers no convenient preparation, and the only resource is to dilute the unquentum picis liquidæ with a large per-centage of chalk and zinc ointments, which ought to be melted together and stirred while cooling; in this way a homogeneous ointment is prepared, which may be spread evenly on soft lint; and, when the leg is dressed with it, a new, healthy epidermis forms under the incrustation made by the chalky constituent of the ointment. The Domette flannel bandage may be put on the limb to keep the dressing in its place; and the application must be renewed every second or third day, according to circumstances.

Arsenic must be prescribed, secundim artem, and a generally tonic regimen is desirable. Many cases of the drier forms of eczema are benefited by soaking the affected limb in the Bath thermal waters.

Eczema impetiginodes, or pustular eczema, is notorious for its obstinateness and its difficulty to cure. Dr. Tilbury Fox has drawn a distinction between those cases of pustular eczema, in which the pus-formation is accounted for by the intensity of the inflammation, and those in which there is a supposed pyogenic habit of body (Brit. Med. Journal, Mar. 12, 1870). The latter condition is what I am now describing, and two authentic cases have lately been under my care. One was a poor lad who came to the Eastern Dispensary, and the poverty of hygiene and food prevented any substantial benefit arising from an attendance of three months, with an ample amount and variety of physic. The other case was that of a tradesman in good circumstances, living in a neighbouring town, and who consulted me after the disease had existed in a severe form for more than a month. I brushed over the whole area of pustulation with a pretty strong solution of nitrate of silver, covered it with benzoated zinc ointment spread thickly upon lint, and wound a Domette bandage over the limb. A drachm of compound tincture of cinchona, with five minims of liquor arsenicalis in an ounce of water, was given three times a-day; and a pill of watery extract of aloes, with sulphate of iron, was taken every night. dressed the leg at home daily, and visited me once a-week. I was amazed at the rapidity with which the disease went away,

and the sound use of the limb returned; nothing in the way of cutaneous therapeutics could have been more satisfactory.

It must be acknowledged that the pustular form of eczema is a sign of grave depression of health, and the improvement of this is a matter of pressing importance. The main point of local treatment is, that all applications should be of a soothing kind, and that ointments are almost always preferable to lotions.

Herpes zoster may affect the outside, front, and inside of the thigh. There is usually a history of severe pains, which are ascribed by the patient to "rheumatism." A combination of quinine and arsenic is certainly very useful in the early neural-gic stage of this disease; and when the neurosis is very severe, nothing relieves it so much as a blister upon the side of the lower spine corresponding to the seat of the disease.

Pemphigus is a disease usually not difficult to treat. Each bulla should be punctured with a tenaculum needle, washed with a weak solution of nitrate of silver, and then dressed with chalk and benzoated zinc ointment. The principle of scabbing is illustrated in the cure of pemphigus more than in any other disease of the skin. The raised cuticle is hardened by the lotion, and then the ointment comes to form an earthy layer over it, and strengthens the protection afforded to the red and tender cutis. Acute febrile pemphigus is, perhaps, better treated by dusting the part with flour.

Sir W. Jenner and Mr. Hutchinson differ as to the necessity of the administration of arsenic, but my own experience is decidedly on the affirmative side of the question. Without its use there is no certainty about any "cure" of the disease, and a relapsing pemphigus is one of the proverbial troubles of therapeutics. I always give arsenic, and generally with iron, for pemphigus occurring at any age, and I am very seldom disappointed in its effects.

P. solitarius is a disease of advanced life, and may occur on the skin over the middle of the tibia, and on the upper surface of the foot. The bulla is often three or four inches in diameter, and the pain which accompanies it may be described as "itching" or "burning." The pathological significance of this disease is considerable, and indicates a low vitality of the part on which it occurs. Moist senile gangrene may be apprehended if the foot be persistently cold and tingling. The limb should be kept in absolute repose, well raised, and covered, when practicable, with

cotton wool; and the constitutional powers should be supported in every possible way.

The favourite seat of *Psoriasis* is on the limbs, and the great majority of non-syphilitic cases require to be treated by the internal administration of arsenic. Externally there are three applications, two of which are of classical efficiency; a diluted tar ointment, and the *unquentum hydrargyri nitratis dilutum* of the old London Pharmacopæia. A portion of a limb can be dressed with the former in the manner specified on a previous page; and the latter can be smeared on at convenient times.

Very recently, a carbolic acid ointment has been strongly recommended,* and I intend to test its utility at the first suitable opportunity.

But there are certain examples of Psoriasis, dignified by the defiant title of P. Inveterata, which baffle the outward and inward means now described; and it is for this class of cases that I wish to establish the trustworthy efficacy of cod-liver oil. There is an obvious physiological reasonableness in the administration of fatty substances (hydrocarbons), whether dietetic or medicinal; the skin-structures are composed largely of fat, and to uphold their nutrition is a sure way to prevent their degradation to disease. The remedy must be continued for many months, and not necessarily in large doses. I am surprised at the scepticism displayed by several dermatologists of repute about the therapeutical power of cod-liver oil in diseases of the skin; and I can explain it only on the supposition that it is seldom fairly tried. The following case is of interest:—

A young woman, aged twenty-two, domestic servant, was under the care of the late Dr. Hillier, during the early part of 1868, for psoriasis, affecting nearly the whole surface of the body, but distinctly worst on the lower limbs. She got apparently well several times, but always relapsed. Dr. Hillier at last advised her to enter the Bath Mineral Water Hospital, where she was a patient for three months, under the care of one of my colleagues; she was dismissed "cured," but the event verified her prediction that in a fortnight she would be as bad as ever. Some friends paid the expense of her remaining in Bath for two months, in order that she might be under my care at the Eastern Dispensary; but I went through the orthodox remedies without any success. In despair she returned to London, and the single thing of any pro-

^{*} By Dr. M'Nab, Lancet, March 19, 1870.

mise left undone was, that she had never taken cod-liver oil. I determined that it should be perseveringly tried, and unaccompanied by any other medicine whatever. She took a tablespoonful twice a-day for six months, and then a less quantity for three months more; and I heard last January that her skin disease had gradually faded away, and that she then considered herself as "cured" at last.

Mr. Erasmus Wilson proposes to call the cutaneous manifestation of syphilis, which is termed psoriasis, "syphiloderma squamosum;" for, as he says, "that which is called lepra is not a lepra, but a syphilis resembling a lepra."* I need not here recapitulate the points of diagnosis by which an eruption can be pronounced to be syphilitic or non-syphilitic; but it can be asserted with some positiveness, that when a scaly disease is seen on the sole of the foot, it has a syphilitic origin. And we shall try to confirm this supposition by inquiring after nodes, ulcerations, and glandular enlargements elsewhere.

A squamous syphilide should always be treated by the administration of the soluble biniodide of mercury, prepared by adding three grains of iodide of potassium to a drachm of liquor hydrargyri bichloridi. I have used this medicine for years, and I wish to speak in the most emphatic way of its potency in curing the syphilodermata; and its effects are most unerring in the squamous forms. I am glad to find that Mr. Berkeley Hill speaks of it with high praise.

In doubtful cases, when it is not quite clear whether we have a syphilide to deal with or not, it is good practice to prescribe arsenic in union with the bichloride of mercury. "Donovan's solution" is, on the whole, rather disappointing.

It only remains for me to say that syphilitic ulceration of the skin of the thigh or leg should be dressed with "black wash," and be treated internally in the method just related.

A NEW VIEW OF IMPETIGO AND ECTHYMA, ARISING FROM RECENT RESEARCHES OF COHNHEIM ON SUPPURATION. By Henry S. Purdon, M.D., L.R.C.P., Physician to the General Hospital, and to the Hospital for Diseases of the Skin, Belfast.

I MPETIGO and Ecthyma are diseases usually observed in debilitated constitutions. In the former affection there is exhibited primary redness of the skin, upon which pustules

^{*} Journal of Cutaneous Medicine. No. V., p. 81.

subsequently form; whilst in Ecthyma we have presented to our view isolated phlyzacious pustules, situated upon a hard, vivid, or even livid red coloured base, due to debility and an impoverished condition of the blood.

Cohnheim's observations have opened up a new field for investigation, and by which we are led to believe that the white blood corpuscles play an important part in suppurative inflammatory processes. To the consideration of these I desire to call attention for a few moments: and, firstly, it may be stated that, according to the width of the capillaries, one or two red corpuscles, or one red and one white corpuscle, can only be allowed to pass side by side in the blood current, which, however, is liable to become stagnated—probably from vaso-motor spasm. The white corpuscles proceed much slower than the red. When inflammation is becoming developed, widening of the smaller arteries occurs, and this dilatation increases with slight intermission, so that the vessels after a time may have nearly increased to twice their original width; moreover the arterial vessels are lengthened and become tortuous; the veins likewise become dilated. After this vascular dilatation has continued for one or two hours, there ensues a reduction in the rapidity of the blood current, the contours of the individual blood corpuscles can now be more distinctly recognised, the arterial pulsations become more evident, and in the arterioles, the white corpuscles can be observed striving towards the walls of the vessels, in which Cohnheim believes he has discovered natural apertures by which the corpuscles may escape and appear in the surrounding tissues. Might this not be the reason that pustules usually appear at the orifices of gland ducts, hair follicles, &c., since we know that these situations are very vascular points, and readily become centres of exudation. The passage of white corpuscles out of the capillaries, and their identity with pus corpuscles, opens up an important field for histological investigation. The important observations of Cohnheim must have a practical bearing, at no distant day, on the subject of therapeutics. It is well known, for instance, that quinine is a valuable remedy in all forms of pustular eruptions, whilst on the other hand, alcohol is injurious, as testified by Dr. Binz,* who found that it produces dilatation of all the capillaries throughout the body. If there be a strong tendency to the formation of pus, it is increased by the adminis-

^{*} The Practitioner, September, 1869.

tration of alcohol. How frequently do we observe pustular affections, as Acne rosacea, Ecthyma, Impetigo occurring on the persons of inveterate drinkers! Whether these states are due, as remarked by Dr. Anstie,* referring to congestion of various organs, to degenerative changes which result from prolonged alcoholic poisoning, or to the direct chemical influence of alcohol upon the nervous tissues, leading to degenerative changes and paralysis of the nerves which preside over nutrition, we cannot at present decide.†

Quinine, as before mentioned, has not these disadvantages, but restores the healthy tone of the vessels, and, by increasing the weakened digestive functions, allows the food proper for the nutrition of the tissues, as remarked by Dr. Beale, to become living germinal matter in the epithelium of the intestines and in the chyle corpuscles, the formed material of which, he says, becomes resolved into substances differing in composition and properties from the food, as albumen and other substances which are dissolved in the fluid part of the blood. Within the lymphatic vessels are formed masses of germinal matter, which Dr. Beale asserts would appropriate any redundancy of nutrient matter which the neighbouring tissues could not take up. In the form of lymph corpuscles, this nutrient matter is returned to the blood, and these bodies (lymph-corpuscles) at length assume the form of white-blood corpuscles. It is not improbable, he says, that the "hæmato-crystalin of the red-blood corpuscles is, by the action of oxygen, gradually resolved into two sets of compounds the one which takes part in nourishing the tissues, as albumen and other substances; the other, which is to be eliminated, as urea, extractives, carbonic acid," &c.

Impetigo is usually a severe inflammation of the skin, the pustule generally grouped in clusters, in some cases resembling herpes, by following the course and distribution of a par-

^{* &}quot;Reynold's System of Medicine," vol. ii.

[†] Since writing the above, an interesting review of Dr. Waldenburg's work on Tuberculosis has appeared in the *Lancet* for April 2, 1870, and from which it seems that in producing tubercle from inoculation, there first ensues statis of the blood in capillaries, and a migration of white blood corpuscles through the vessels' walls, and with these the foreign corpuscular elements form a minute collection of cells, around which connective tissue-growth takes place, the whole ending in tuberculous granulations.

^{‡ &}quot;Archives of Medicine," vol. ii.

ticular nerve, as I have observed in several instances, especially on the lower extremities. According to Erasmus Wilson,* there prevails a decided tendency on the part of the pustules to spread by the circumference; sometimes the spreading periphery assumes a semi-pustular or vesicular character, and then we have presented to us a form of the eruption which is termed impetigo phlyctænodes. As the disease proceeds, scabs and incrustations form; and, if the eruption is situated upon the face, swelling and enlargement of the neighbouring lymphatic glands usually ensue, said to be due to irritation.

The pustules of impetigo differ from those of ecthyma. In the latter disease, the deeper structures are affected. Impetigo, Mr. Wilson says, is an eruption evincing a lower degree of power than either eczema or lichen, and is met with chiefly at the nutritive period of life in weakly children, among the debilitated and cachectic in youth, and in the adult, and among the poorer classes.

From the preceding brief remarks, we see that the corpuscles can only pass out by previously-formed openings; for they could not break through a solid, closed wall. The white-corpuscles, as long as they proceed uninterruptedly, retain a spherical form, in which they are in their greatest possible state of contraction, but as soon as they come to rest, amöboid motions take place in them. Dr. Allen (in his review of Cohnheim's observations, and from which I have freely quoted) states that the effect of the now commencing amöboid motions must be a penetration of the walls of the vessels, as the prolongations now developed can only press forward at those situations where the least, or no obstruction is met with, and these places are the stomata and canaliculi of the connective tissue. The red corpuscles have no spontaneous contractility, or are capable of changing their form. Hence the exit of corpuscles from the capillaries is due, according to the authorities quoted, to increased pressure, dilatation, and diminished resistance of the arterial walls, the red corpuscles never passing out till after the white have prepared the way for their so doing. We may conclude, then, that when quinine is given in these cases, it is rapidly absorbed, and, according to Dr. Bartholow, † "exerts an inhibitive influence upon the heart and arterioles," and is useful in congestions of the spleen, and in orchitis;

^{*} Journal of Cutaneous Medicine, vol. iii., p. 338.

[†] Half-Yearly Compendium.

the latter disease Dr. Bartholow has cured with a few full doses, "by virtue of its influence over the vaso-motor nerves—a fact derived from a study of its physiological effects." Quinine, Dr. Handfield Jones* believes, tones and excites the vaso-motor nerves to such a degree that the minute arteries become contracted, and the parts they supply anæmic.

ON HERPETIC ERUPTIONS AND ALLIED AFFECTIONS OBSERVED IN DUBLIN DURING THE YEAR 1869.

By Dr. W. Frazer, M.R.I.A., Lecturer on Materia Medica, Carmichael School of Medicine.

THE records of a private medical practice in Dublin show that examples of acute serous exudative eruptions prevailed, during the year 1869; these eruptions ranging in degree from groups of herpetic vesicles of minute size to bullæ of considerable dimensions. Several varieties of the rashes that are more strictly classified as Herpetic, were far in excess of their usual average numbers: for example, Herpetic eruptions of the mouth and fauces, which were so common that they appeared to assume a decided epidemic character—children and adults alike suffering from these attacks. The ordinary typical forms, such as H. zoster, H. phlyctenodes, and H. labialis, likewise abounded beyond their average frequence, and were represented with about equal profusion. There is one striking exception that requires to be made to this statement, for which no satisfactory explanation occurs to me—the local eruption peculiar to males, H. præputialis and its equivalent rash, pudendal herpes, which appears in females, was, if anything, less frequent, or at least did not fall under observation appreciably more often than during former years. It is possible that the increased number of cases, where ordinary attacks of cutaneous herpes happened, would have excited little notice were it not for the wide-spread outbreak of herpes on the mucous membrane of the mouth; for the previous experience of many years added together did not afford near so many examples of such attacks occupying the mouth and fauces as fell under treatment during the summer and autumn months of the past year; and it be-

^{*} Functional Nervous Disorders, p. 533.

came easy of belief that some peculiar epidemic tendency must have been prevalent to account for this comparatively extensive outbreak. Whenever the affection occurred in families it did not spread from the persons attacked through the other children, hence there were no satisfactory grounds for attributing to it any infectious properties. It seemed to prevail with equal frequence throughout the city and its suburban districts. At first some persons were disposed to ascribe its outbreak to drinking the milk of diseased cows; of this there was no evidence whatever deserving of credence; on the contrary, the arbitrary development of herpes in one or two persons out of an entire family would, to a great extent, disprove this supposition. So far as I could ascertain there were no special circumstances either in the temperature of the seasons, the atmosphere, the habits of life of the people, or the local circumstances of the city to throw light on its causation.

This epidemic herpetic eruption of the mouth was noticed in the majority of persons who suffered from it to occupy the palate, the inside of the cheeks, and lips, less often appearing on the gums, and seldom on the tongue or pharynx; when it fell under observation within the first twenty-four hours of its development the rash resembled in every respect an incipient patch of ordinary H. phlyctenodes. The isolated vesicles soon acquired a narrow, vivid zone of deep scarlet colour that surrounded each phlyctena for a variable extent; as the vesicles broke, and their serous contents escaped, these spots degenerated into superficial and painful ulcerations or erosions; and in parts where they ran close together, their confluence produced irregular-shaped, unhealthy-looking sores. In the majority of those individuals attacked, the eruption was limited to a single crop of vesicles, or at least to such consecutive groups as became formed within two or three days, after which time they produced trifling annoyance; pursuing a rapid course, their extreme duration seldom extended much beyond a week. When the disease lasted longer than this, it seemed to depend on the development of one or more distinct successive crops of vesicles; unless in a few instances, and at best these were rare and exceptional cases, where the vesicles first formed had degenerated into troublesome, superficial sores, owing to deranged health or some temporary debility. In all those who were attacked the breath acquired a peculiar and offensive odour that was sufficient to diagnose the disease when

once recognised; this feature was observed so soon as the ulcerations became formed, and disappeared when they commenced to heal. During the ulcerative stage, patients sometime found it difficult to swallow, and salt or sapid food produced increased suffering. In aggravated attacks saliva ran from the mouth in quantity, and the salivary glands were swollen, resembling the appearance produced by the injudicious action of mercurials given to excess. The constitutional symptoms were, in average cases, slight and unimportant, some trifling febrile disturbance and restlessness were present for a day or so, or the usual evidences of a catarrhal attack; in young children there was occasional gastric disturbance and intermitting fever, worse at night. In one exceptional and aggravated attack where the inside of the cheeks, the palate, tongue, and lips were all covered with herpetic rash, and where repeated crops continued to develop at intervals, for upwards of three weeks, the symptoms at first ran high: vomiting, headache, and pains in the bones ushered in a pyrexial state that soon passed into a low asthenic fever; the saliva ran from the mouth in quantity, upwards of a pint escaping every twelve hours, and its constant secretion day and night prevented sleep, as it filled the mouth to excess, and excited loathing and dread of suffocation; continued nausea interfered with the administration of food, and the mouth was so painful that for a time it was difficult to prevail on the sufferer even to attempt to swallow. Milk and seltzer water was at last taken in small quantities, and afterwards fluid food; but for at least three weeks the sight of solid food brought back loathing and excited vomiting. In this attack, after the mouth had healed, successive crops of herpetic rash occupied the lips, swelling them to double their usual size, forming thick, harsh crusts, and from time to time the cuticle became detached in large scabs. About six weeks passed before the tendency to these recurring attacks ceased altogether.

The treatment that succeeded best was the administration of muriated tincture of iron given in syrup, of this usually 3 iii. was prescribed, diluted with 3 ii. syrup of orange peel, and a teaspoonful directed every four hours: it was seldom found unpleasant, and its effects proved prompt and satisfactory; when the ulcers caused much pain or became angry, some of the chalybeate syrup was applied to them topically, and always with beneficial results. Of course, in a few cases where the symptoms

were more aggravated than ordinary, it was requisite to employ all the special treatment and dietetic resources that the peculiarities of such attack demanded, to sustain the patient's strength and promote speedy convalescence.

Herpes Zoster. I find there were three interesting cases of Herpes Zoster that came under observation in which the eruption appeared on the temple and brow and attacked the eveball, the conjunctiva rising in vesicles and the cornea becoming covered with crops of obstinate phlyctenæ. Two of these cases proved rather troublesome and ran a tedious course, the vesicles degenerating into ulcerations, and repeated recurring outbreaks prolonging the attack. In one of these instances, which happened after prolonged exposure in travelling to harsh, inclement weather, in an individual whose health was broken down from temporary causes, the ball of the eye became implicated to a serious extent; there was deep-seated pain complained of within the globe, turbidity of the aqueous humor, infiltration and opacity of the cornea, iritis, hypopion, and impaired vision such as might be expected, all of which yielded in time to treatment, in which I had the valued aid of my friend Dr. Wilson. It was requisite to keep the eye at rest, to use small leechings more than once, apply blisters, and give alterative mercurials, combined with bark and quinine, in full doses. In the earlier stages of the attack, solution of atropia was dropped into the eye at regular intervals; the infiltration of the cornea, which was considerable, persisted for some weeks before it was altogether removed. In reconsidering the history of this case, I am disposed to attribute the patient's improvement and satisfactory recovery to the diligent use of liberal diet, and to the alterative mercurials, given with full doses of quinine. So soon as the harsh weather became mild enough to admit of it, complete change of air was recommended, and proved of material service. The herpes in this patient attacked the left temple, and the secondary neuralgic pains were not severe, and limited to the eye and temporal region. In both the other patients, who suffered from herpes of the temple, the left side was also the seat of the eruption.

In a few exceptional instances of H. Zoster, the usual local symptoms that accompany that disease, such as burning heat in the affected part, and tingling or shooting pains of neuralgic character, extending along the course of some defined nerve tract were present and severe, yet the vesicular eruption itself was

undeveloped and almost suppressed. Thus in one of these attacks after the patient had complained for about a week of burning sensations, compared to the effects of fire, and of pleurodynia extending across the back and side of the chest in the course of the third and fourth intercostal spaces on the right side, some scattered vesicles, not exceeding four in number, became apparent, deep-seated in the skin; they were of small size, and soon disappeared by drying up, but were succeeded by smart attacks of neuralgia, shooting along the affected part, that yielded to quinine and time. In another instance which happened to an elderly lady in the Spring of 1869, the disproportion between the amount of rash and the severity of the local symptoms was most remarkable. She became attacked at a period that her health was impaired by previous illness, when convalescing from protracted low fever attended with catarrhal complication. The eruption was so trifling that to a superficial observer it might be considered absent; careful search showed a few scattered and deep-seated vesicles, arranged in imperfect patches. The topical symptoms were aggravated; she was distressed by constant irritation, heat, and neuralgic pain, which destroyed her rest, and excited in her mind unfounded apprehensions of the development of some serious and fatal malady. This painful local annoyance continued to recur at repeated intervals for about three weeks; at last becoming less severe, and disappearing as the state of her health improved, which happened so soon as she could be induced to go to the country for change of air. When the pain was at its worst, collodion, medicated with morphia and aconitina, gave her temporary relief. She would not allow subcutaneous injection to be tried.

The line of separation between ordinary vesicles and bullæ, depending on the sole difference of comparative bulk, both eruptions fall under the common group of acute serous exudations, hence it might be expected that when vesicular eruptions of herpetic origin prevailed, bullæ would occur with increased frequence. This, also, was borne out by observation, making allowance for the comparative rarity of bullæ in practice; therefore, although the following cases are of slight intrinsic importance, they deserve being placed on record in endeavouring to preserve a brief note of the prevailing tendency of cutaneous disease in the metropolis of Ireland, during 1869.

Acute Pemphigus or Pompholyx. A young gentleman, aged

seventeen years, went to bed in perfect health; on waking next morning after sound sleep, he felt on the front of his forearm, about the junction of the lower and middle third, a sensation of burning, which he described as if the skin were scalded or stung with nettles. On looking at this spot a bulla was perceived, fully half the size of a large walnut, forming a semiglobular elevation, distended with light, yellow serum. This was punctured; simple cotton wool applied, and in two or three days the cuticle peeled off, the surface having healed: there was no return of the attack, nor any constitutional symptoms of importance. At the side of the bulla, and an inch from its edge, two smaller bullæ were observed the size of haricot beans; they both dried up without escape of their contents.

Acute Pemphigus. (Second case.) The mother of this gentleman, at least six weeks after his attack, was startled on waking to find water running down her left arm, and on looking for its source noticed that a bulla, fully the size of a large grape, was formed over the olecranon, which had burst, and discharged its contents. During the course of the day it caused her much pain, like a recent burn or scald, and next day the elbow felt tender and stiff, and a distinct zone of erysipelatous redness became apparent round the blistered surface, which continued extending with a well-defined raised edge, until it constituted a patch the size of the palm of the hand. As this declined, the surface of the vesicle commenced to suppurate, and altogether a week passed before the local disturbance subsided. The bursa of the olecranon, which was immediately under the bulla, likewise became enlarged, and remained swollen for two or three weeks, and the surface left by the broken bleb was rather tedious in healing: no other vesicles or bullæ appeared near this solitary spot of pemphigus.

I have not thought it requisite to offer numerical tables of the comparative frequence of these vesicular eruptions, the object of the paper being simply to record their occurrence in this city, with exceptional profusion during the past year; and I understand that they were equally remarkable for their wide-spread prevalence in other districts—this more general aspect of the history of herpetic affections is, however, foreign to the origin of the present communication.

NOTES ON CUTANEOUS THERAPEUTICS.

By J. WARING CURRAN, L.K. & Q.C.P.I., L.R.C.S.I.

In the columns of a much-respected contemporary, the Medical Press and Circular, I have already published my experience of the Iodide of Ammonium in the treatment of diseases of the glandular system. My experience of the drug has been extensive, and its success in the treatment of the diseases indicated in the communication to which I refer, is best exemplified by the fact, that I continue its use in those diseases, and that the most eminent Dermatologists in England and Ireland have communicated to me corroborative testimony of its value and efficacy as a therapeutic agent, and its greater potency over the iodide of potassium.

Here I must content myself with the action of the iodide of ammonium in the treatment of a most common, but not the less troublesome disease, Erysipelas. Remembering that erysipelas is an unhealthy inflammation of the skin, with a disposition to spread, and that it is essentially a blood disease dependent upon some zymotic cause, depositing its morbid products—some unhealthy plasma—in the cutaneous structures. I must not pretend, as some enthusiasts boast, the power to cure the disease by local applications alone; but I do contend that the progress of the disease can be stayed until the germs of the complaint are diminished by a method of treatment which I shall presently explain.

Simple Cutaneous Erysipelas is never a troublesome complaint unless when it affects some loose cellular part, when it becomes somewhat complicated, and not unfrequently, owing to the amount of serous effusion, terminates in purulent infiltration. This is very tedious and very undesirable, whilst it seriously retards recovery by the introduction of fresh symptoms, not unfrequently difficult to overcome. In this variety of erysipelas I apply to the part affected the iodide of ammonium ointment. I prescribe it of the same strength as the iodide of potassium ointment of the British Pharmacopeia, and its effect is to be observed rather than described. It rapidly promotes absorption of the effusion underneath the skin, and in sixteen cases in which I have employed it, this drug has been uniformly successful. In one patient the lancet had to be called into requisition, but in

this I was late commencing my treatment. At the same time I exhibit internally with infusion of yellow cinchona bark, fourgrain doses of the iodide of ammonium, thrice daily.

I must honestly acknowledge that I have fairly experimented with the iodide of ammonium ointment in *phlegmonous erysipelas*, and that I have failed in obtaining good results from its use in that form of the disease.

Now, and I trust success will actuate me in always adhering to the plan, when called in to a case of erysipelas, erratic or otherwise, I direct some of the ointment to be smeared over the eruption; but following upon the plan of Mr. Higginbotham, applying nitrate of silver to the healthy skin immediately surrounding the diseased part, I spread iodide of ammonium ointment on strips of lint, and apply the pledgets around the circumferental parts, I am proud to say that the rash has never yet spread beyond the anointed lint. When erysipelas affects the face and head, this method of treatment is somewhat difficult to carry out, but I reason my patient into a permission to remove the hair, and carry into execution my plan.

In no single instance have I had metastasis to the meninges, because I contend that iodide of ammonium promotes the absorption of the unhealthy plasma when locally applied, and that when internally administered, it carries off through the eliminative channels the materies morbi of the disease. It is needless for me to remark that I freely purge in all cases as well, and that the purgative I use is podophyllin, combined with compound extract of colocynth. In the debilitated I have recourse to a milder aperient. Of course it is necessary to be guided by the habits, constitution, and strength of system indicated by the patient.

As an adjunct to the ointment I recommend, I have found in practice considerable, in truth very valuable, help from the effects of pressure, when the swelling is great and the effusion extreme. After the application of the cerate, I firmly, but not too tightly, adjust a bandage made of some light fabric. When it is not feasible, owing to the part affected, to apply bandaging over the dressing, I firmly but with equal pressure place some strips of soap plaster: from this I have attained more rapid absorption.

Some cases are accompanied by a high amount of inflammatory fever, with great increase of temperature; in simple language, when the hand is placed over the erysipelatous rash, a

burning sensation is experienced. In such a case, before employing my cerate, I sponge (and if need be constantly apply for a few hours) this part with a lotion of spirits of ammonia.

If the patient be of an irritable habit, or complain loudly of pain, I prescribe a little liniment of belladonna with the cerate. It is a useful and tranquillising addition, steadying the capillary circulation, by overcoming the contracted condition of the vessels.

I hope it may not be considered a gross divergence from the subject of the present communication if I remark that in dry, cuticular eruptions of persistent character, I have experienced an equally satisfactory result from the application and internal administration of iodide of ammonium, as I have in those cases of glandular disease upon which I have elsewhere written, and that important complaint which is the subject-matter of this paper.

The following notes were written and forwarded to me by an old and respected Dublin surgeon. They carry due weight with them, and the plan of treatment recommended is so simple, I trust many of the readers of the Journal of Cutaneous Medicine will be influenced in adopting it, and note the result:—

The case of skin disease I mentioned was that of a young fellow, an intimate friend of mine, who consulted me, believing he had heart disease, which I found to be merely a nervous affection.

I directed him to apply a belladonna plaster with appropriate general treatment, not necessary to mention, as not pertinent to my present object. After about a month he came back to say he was well, and asked me to remove the plaster. On proceeding to do so, I noticed that his body was covered over extensively with that peculiar browning of the skin resembling freckles on the face but darker, called chloasma. It extended from the scapular region behind, to the nates, and in front from the clavicles to about midway between umbilicus and pubes; was confluent everywhere except at sides about the angles of the ribs, where it became broken up into patches, fading away into minute specks, and quite absent from the axilla down the sides. No doubt, you have seen cases of it, and will be able to correct me if I am wrong in the nomenclature. It is not a common disease by any means. I don't recollect having seen more than half-a-dozen cases, three of which, including that described, I treated successfully in the manner I shall now mention. But before doing so, I may state that two of the cases were

man and wife, appearing on him first and subsequently on her, first on the abdominal region. There was reason to suspect a syphilitic taint in one of the cases, but not at all in the others, and I don't think it had any connection with it—but this is diverging.

I had not taken off his shirt when examining my young patient in the first instance, as he raised some objection, and it was not absolutely necessary. It now appeared that he felt very sensitive about the state of his skin, and thought it incurable, as he had been treated by different medical men with arsenic, &c., without any marked benefit. The disease got paler while taking the arsenic, but never was removed.

All this I learned before touching the plaster. Guess my surprise to find the surface underneath perfectly blanched, the brown colour ceasing at a sharp line where the edge of the plaster came to.

I did not attribute the result in any way to the belladonna, any more than his imaginary heart disease; but I at once determined to take a hint from accident, and promised to cure him without any internal medicine. I accordingly got some brown soap plaster, and applied a large piece to cover the whole front from the top, and directed him to wear it for a fortnight, and then come to me. The plaster required a little nicking here and there to meet the irregularities of the surface, but nothing more was then done. On his return, I was gratified to find my expectations fully realised, and I then treated the back in the same way with the same result.

There were still some patches and specks at the side, terminating at an abrupt line, left designedly to illustrate the disease and cure.

When in this stage I exhibited my patient to a medical friend, as I considered the thing original and of practical value. The spots on the sides were then cured in the same way.

The other cases occurred at a long interval, and having been treated in the same way got well also.

If I met such cases again in practice I should try either flexile collodion, coloured black, or solution of gutta percha in chloroform coloured, as being more permanent than gelatine, and less likely to irritate the skin than isinglass on silk or other cloth, which is apt to turn at the edges.

As you are an earnest therapeutical inquirer, I give you the

hint if you wish to follow it up. I don't claim any credit, as it was only a happy accident, and not reasoned out. If you wish you can publish the case and result.

I am aware of the applications you speak of, for pitting in small pox, and their frequent failure, but that I believe is owing to the oozing underneath, which lifts the covering, and so lets in air and light, to the exclusion of which I attribute the effect I described.

In the large class of dry cutaneous diseases, not attended with exudation of any kind, I expect this principle might be adopted with great benefit.*

Seeing in a recent number of the *Edinburgh Medical Journal* some cases treated in a somewhat similar method, has reminded me of the accident which led me to do the same several years ago.

NOTES ON PURPURA HÆMORRHAGICA, WITH THE HISTORY OF AN INTERESTING CASE.

BY DR. JOSEPH LINDSAY. COMMUNICATED BY DR. H. BROWN, BELFAST.

ATE on the night of March 11th, I was requested to visit Miss —. This young lady had had a molar tooth extracted on the previous day, and there was considerable hæmorrhage, which had increased in severity up to the time of my visit, from the socket.

On examining the mouth of my patient I found that the gums were soft and spongy, and from the sockets of some teeth, which had been extracted several months previously, a fungus, elevated and bleeding, was projecting. As some cases of purpura hæmorrhagica had come under my notice in hospital practice, I suspected that my patient might be labouring under that disease, and on examination found distinct purple spots scattered over both arms.

The patient had noticed these spots some days before, but as she felt in ordinary health, did not think them of consequence, and in no way connected them with her present illness.

The patient is a well-formed woman of twenty-eight years. She

* Hardy of St. Louis has adopted and uses an impermeable dressing in the treatment of Eczema and allied cutaneous affections. See JOURNAL OF CUTANEOUS MEDICINE. Vol. III., p. 41.

has never menstruated, but with that exception, has enjoyed good health until about eighteen months ago. From that time up to the date of my visit, she has suffered from dyspepsia, and occasional hysterical paroxysms. On more minute examination, I found that the spots were small, soft, persistent on pressure, and of a deep purple tint. They were confined entirely to the extremities.

In reply to my inquiries, the patient's mother informed me that there had been considerable bloody discharge from the vagina that afternoon; this discharge was not preserved, and I requested that any which might occur again should be retained for my inspection. The pulse was 80, strong and full, and the patient was entirely free from pain or sickness. I directed that she should be left quiet in bed, and ordered a teaspoonful of the mixture marked (a) every two hours, and half a wineglassful of the mixture marked (b) every four hours.

及 (a) Acidi Citrici, ... 3 iv.
Syrupi Rhœados, ... 3 iii.
Aquæ ad ... 3 iv. 负

及 (b) Tinct. Ferri. Mur., ... 3 ii.

12th, 10 a.m.—Bleeding from the gums has continued without intermission during the night, and upwards of three pints of bloody discharge have passed per vaginam: the discharge was dark in colour, and showed no tendency to coagulate. Tongue coated with blood; bowels confined; pulse 80, and of fair strength; skin cool. To have beef tea at intervals throughout the day, and a tablespoonful of the subjoined mixture every two hours; citric acid mixture to be discontinued.

Inf. Quassiæ ... ¾ viij.

爾

R Acid. Nit. Dil. ... 3 ii.
Acid. Sulp. Dil. ... 3 ii.
Syrup. Rhœados, ... 3 ss.
Inf. Ros. comp. ad... 3 viii.

Also to have lemonade, prepared from lemon juice, ad libitum. 7 p.m.—Bleeding from gums continues, also from vagina, and there has been considerable hæmaturia. Pulse 70, weak. To have a glass of claret every three hours during the night. Other treatment continued.

13th.—Passed a very restless night. Bleeding from gums not

diminished in quantity. Complains that the odour of the blood is intolerable. Hæmorrhage from vagina and urethra slightly diminished in quantity. Pulse 90, very weak; skin cool; bowels confined. A piece of ice to be sucked during the day; wine, medicines, &c., to be continued; to have—

R Ol. Ricini, ... 3 iv. Tinct. Rhei. co. ... 3 ii. Aquæ Menth. pip. ad ... 3 iss. Ft. haustus, statim sumendus.

14th.—Bleeding from gums and vagina much diminished. Spots still distinct, and in some instances they have coalesced. Bowels freely opened; matter ejected dark in colour, but free from blood. Pulse 76, weak. She has taken a fair quantity of nourishment, and states that she is quite comfortable, and free from pain and sickness. To continue medicines, &c.

15th.—Slept four hours during the night; complains much of nausea and headache, and severe pain in the back. Fainted on attempting to sit up in bed this morning. Hæmorrhage about the same in quantity as on previous day. Acid mixture to be taken every hour; tonic every two hours.

16th.—Bleeding from the gums diminished. Quantity of blood passed from vagina reduced to 8 ozs. last twenty-four hours. Patient states that she is much better. Pulse 76, weak. Spots distinct; bowels confined. Repeat castor oil draught, and continue everything.

17th.—Bleeding from gums still continues, and occurs at intervals; hæmorrhage from vagina inconsiderable; bowels opened; ejected matter dark in colour, but free from blood; skin cool; pulse 76, and of fair strength. At the suggestion of Dr. H. Brown, I directed that tincture of ergot should be administered in half-drachm doses every two hours for twelve hours. Medicines, wine, &c., to be taken as before.

18th.—Hæmorrhage has entirely ceased. Patient complains of noise in the head. Tongue coated with bloody matter; skin cool; bowels open; pulse 80. Tincture of ergot to be discontinued. Acid mixture to be taken every four hours.

20th.—No recurrence of hæmorrhage. Tongue clean; skin cool; pulse 80, and of fair strength; appetite good; spots still distinct. Patient feels quite comfortable. Acid mixture discontinued.

22nd.—Spots beginning to fade. Patient going on most favourably.

OBSERVATIONS ON PURPURA.

By Dr. H. Brown.

THE subject of Purpura has from time to time occupied some attention in systematic medical treatises as well as in those works devoted to Dermatology, properly so called, and it presents many features of interest and a wide field for speculation. Some writers have not failed to take advantage of the opportunities thus offered; but, as yet, very little light has been thrown upon the causes of this affection. If we examine carefully the symptoms, and inquire minutely into the causes of scurvy, and then ask ourselves the question—How have scurvy and purpura come to stand in such close relation to each other? we get not a little confounded.

To call purpura land scurvy may be all very well; but it should not be imagined that the causes are the same which produce it and scurvy, properly so called. I confess I cannot find any strong resemblance between purpura and scurvy. The causes which produce scurvy are always constant, or nearly so, while purpura, on the other hand, occurs without any well-ascertained cause, so frequently, and under such opposite conditions, that the etiology of this affection is thereby rendered most perplexing and unsatisfactory. After all that has been written, the causes of purpura are still involved in obscurity.

Purpura and scurvy are two affections which differ so much in their nature, and are brought about by causes so widely at variance, that I cannot consider them more than slightly allied to each other. We may class them under the head of "general diseases," and consider the most fitting place for them to be that of juxtaposition. But what comes of all our ideas of similarity when we have to treat these cases individually? Antiscorbutics have little effect in purpura; but some vegetables, without any medicines at all, will cure a patient of scurvy.

Sponginess of the gums and the occurrence of petechiæ are not to be considered pathognomonic of either. In many other instances these symptoms are present without purpura, or even a trace of discernible scurvy. The late Dr. Hillier, writing on the subject, has well said, "With the advance of medical knowledge, it is very likely that the cases even now classed together under

the name of purpura, will be further distributed under several distinct categories according to their real pathological character."

Whatever change the blood may undergo in purpura, it is evident the capillaries of the mucous membranes and skin also undergo some alteration. Parkes has recorded cases in which iron was present in the blood in unusually large quantities in purpuric disease. If this be so, it is strong evidence that upon the deficiency of the iron salt of the blood, purpura does not depend. Again, in other cases, fibrin has not been found deficient, even although the blood is less coagulable than in other diseased states of the system. Upon this, however, little need be said, since we know so little, even in this advanced age, of the changes which may be readily effected, in short spaces of time, in the whole volume of the blood constituents under certain conditions. According to Fuchs, whose authority is quoted by the greatest Dermatologist of our age, Hebra, those "who are ill-fed, and who live in damp, close, and cold dwellings," are especially the subjects of purpura.

Suppose we grant this, and even more, how is it that so few cases occur in Great Britain and Ireland? Very few medical men have had under their charge more than a few isolated cases of purpura, and some also have not, in a long series of years, seen a single case of true purpura hæmorrhagica. Hebra has treated the subject of purpura, like all other authors, with an evident feeling of reticence. He cannot reconcile conflicting points; and with blood changes, and capillary alterations cropping up at every stride of imagination, he is at last obliged to confess—"Hence it is most probable that the circumstances enumerated above have but little influence in producing purpura, and that they have been brought forward only because they are well-known causes of so nearly related a disease as scurvy." This is certainly open-minded; but throughout Hebra's article. no light is shed upon this obscure affection. To assign "telluric influence" as a cause of purpura (and that only insinuatingly) is just making a worse job of a badly-constructed hypothesis. I have gone over everything of importance that I could find at all bearing upon the subject of purpura, and I confess I am now as much "at sea" as ever.

It is not very pleasant to have such a story to narrate; but let any man carefully examine what has been written upon the subject, and he will candidly confess that so far as regards the etiology of purpura, we know nothing at all worthy of being described under the heading "cause." The diagnosis is simple, and the results, in many cases, are too well mapped out.

The treatment is not always so well understood. Why some order lime juice, lemon juice, or citric acid, I cannot understand.

These we know are useful in scurvy; but they are next to useless in purpura.

Dr. Hillier, in his article on purpura, in "Reynold's System of Medicine," offers some good remarks at the beginning of "treatment;" but there is nothing striking throughout this recent article. I am afraid very few will now think of bleeding a purpuric patient. Salines may be of use, as Miller pointed out long since; but their use is very doubtful; and calomel and jalap may not be without some good properties; but active catharsis in purpura is, to say the least, open to grave question. Iron is unquestionably an excellent remedy; but it is often overrated. I think thirty drops of the tincture quite sufficient for one dose, and this dose can hardly be repeated oftener (if the iron be continued for some time) than every four hours. patients could take half an ounce of the tincture of iron in the twenty-four hours, for some days, without much inconvenience. Indeed it is difficult to understand how large doses can be administered for days together without untoward results. large doses of turpentine, recommended by the late Dr. Neligan in this affection, could hardly prove of such signal benefit as to warrant their frequent use. How a patient, say a young lady, could be prevailed upon to swallow an ounce, or an ounce and a-half of turpentine, is more than I can comprehend. Larch bark tincture, on the other hand, in puerile doses, and a host of other remedies, have been recommended. Ergot of rye is undoubtedly a most useful and energetic stimulant; and in a work like the "System of Medicine," I cannot account for the omission of this potent drug.

Bark, or quinine, with the mineral acids, and an occasional purgative of a mild description, with judiciously-arranged dietetic treatment, offer the fairest chances of success in the treatment of purpura. As a hæmostatic, ergot, in the form of tincture, liquor, or ergotine, is almost invaluable in this, as well as in many other affections, complicated with capillary hæmorrhage. Tannin, and other astringents, may be useful in purpura; but

the use of such remedies cannot be continued for long periods without much detriment.

Hebra has said that "no universal rules can be given on the subject" of treatment in purpura.

This is very evident. The causes are not always alike that operate (so far as we can ascertain) in the production of the diseased state called purpura. At one time, the ill-fed, ill-clad, and miserable inhabitant of some wretched abode is the subject of purpuric disease; at another, the wealthy inmate of some cosy dwelling is appointed to undergo the varying vicissitudes of this affection. Why, it is difficult to say; nay, is it not almost impossible? Apart from blood change, or changes, I cannot doubt but that the capillary vessels are the chief seats of the disordered condition; and in whatever way the lesions or changes in these vessels are brought about, there is an evident want of that tonicity upon which depends the proper carrying-on of those vital functions with which every organ, blood-vessel, nerve, or organic constituent of the bodily frame at first become possessed, and upon the continuance of which health must ever depend.

In these remarks I have purposely avoided entering into the varieties of purpura, and many other points in connection with its etiology, as well as the treatment of the disease. I have also passed by many interesting matters in connection with the case given above, and so well described by Dr. Lindsay, to whose kindness I am indebted for the history, which I now present to the notice of the profession.

CASE OF LEPRA.

By C. D. Purdon, M.A., M.B., Dub., Phys. Belfast Charitable Infirmary, &c.

THE following case of Lepra is remarkable, from the fact that the patient has not suffered from it during the period of utero-gestation:—

Mrs. K., at 25, when a girl, was attacked with lepra. After being under the care of the late Dr. Neligan, of Dublin, the disease was entirely removed, and continued so for several years. After the birth of the first child she perceived one or two spots of the former disease beginning to appear on the inside of the thighs;

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but as they did not increase she paid no attention to them, especially as in about one or two months she became pregnant. The disease began then to depart, so that in a very short time it went away entirely; but, some time after the birth of the second child, she again noticed the re-appearance of the former eruption. However, in about three or four months, again becoming pregnant, the disease disappeared, and did not make a fresh attack till after the birth of the third child—and, on the sufferer becoming again pregnant, disappeared, only to re-appear in a more inveterate form after the birth of this one. She is now completely covered with lepra; and I might mention that the tongue is of a deep red colour. She was put under the influence of liq. arsen. sod., and had napthaline ointment applied over the affected parts. There is one peculiarity that appeared during treatment:—Before the spots began to fade the tongue assumed its natural appearance. In the usual example of lepra occurring in females, we find that if they become pregnant the eruption appears, whilst in the case recorded it was quite the opposite. Over-nursing is another cause.

REVIEWS.

Lectures on Ekzema and Ekzematous Affections. By Erasmus Wilson, F.R.S., F.R.C.S., Professor of Dermatology in the Royal College of Surgeons of England. London: John Churchill & Sons, 1870.

THE name of Erasmus Wilson is well-known to the profession as a distinguished and accomplished dermatologist. The lectures contained in the handsome volume before us appeared principally in this Journal, of which, as our readers are aware, Mr. Wilson was the founder and first Editor, consequently any lengthened notice on our part will be superfluous. The first chapter treats chiefly of the anatomy and physiology of the skin, in which department the author evidently maintains the high position which he has gained. At page 99, we find some most interesting remarks on contagion and hereditity. The part of the work that refers to treatment is replete with sound practical

advice, established on the best of all groundworks—matured experience. In our present number will be found an interesting paper of Mr. Wilson's, and we hope that from time to time we may be favoured with similar articles. We regret that our space permits of only this brief notice of the above work on Ekzema, of which word, by the way, the author considers that there is no necessity for excusing the orthography, as it is Greek, "consequently the spelling is also Greek."

Report on the Progress of Practical and Scientific Medicine in different parts of the World. Edited by Horace Dobell, Senior Physician to the Royal Hospital for Diseases of the Chest. London: Longman, Green, & Co., 1870.

A FTER a careful perusal of the above reports, we cannot but admire the patience and perseverance displayed by the Editor in the accurate arrangement of the varied subjects contained in the volume before us. We have reports from various distant parts of the world, as well as from localities nearer home, also papers by well-known physicians and surgeons on several most interesting subjects contained under the following heads:— Anatomy and Physiology, Chemistry, Etiology, Hygiene, Treatment of Disease, Materia Medica, Pharmacy, &c. We regret that we have not any space for extracts, but shall give a brief notice of the work. Dermatologists will find much interesting information in the report for France, especially in that part which relates to the observations of M. St. Cyr, of Lyons, on the occurrence of favus in cats and dogs, and its transmission to the human race. That mice, and frequently cats, are subject to favus is well known, and cases have been recorded in which this disease has been transmitted from these animals, as well as the similar disease of tinea circinata from cattle. We have seen the case of a little girl becoming affected by nursing a cat, exhibiting several well-marked favus-cups on her forearm.

Leprosy is frequently mentioned in the reports from different countries, and some interesting facts are recorded, especially in the report from Iceland, but we must confess that we should like to see a distinct section in the work for Dermatological communications, as at present one is obliged to hunt through each report for the knowledge required, the index to the volume not furnishing the necessary information.

Most of our readers are probably acquainted with the fact that it is to Dr. Dobell we are indebted for the introduction of "Pancreatic-Emulsion of Fat." Dr. Kinkead publishes a paper on the employment of this remedy in phthisis in Ireland, illustrated by a table of opinions of medical men who have prescribed that article, and from which it is evident that the emulsion is being more largely used than heretofore. Dr. Cameron furnishes a most interesting report, exhibiting much thought and reflection. We are glad to be in a position to inform our readers that these reports, of which the present volume is the first number, will be continued in an enlarged and more accurate form; and in a letter to ourselves, the Editor states that he "has made most complete arrangements for the reports of the United Kingdom of Great Britain and Ireland for 1870." The Editor has our best wishes for the success of his undertaking, of which we have little doubt.

Editorial Commentary.

DERMATOLOGICAL REPORTS.

WE have much pleasure in announcing that a series of reports on the progress of Dermatology in France, Germany, Italy, and America, will appear from time to time in this Journal. Special attention will be given to the important subject of cutaneous therapeutics. We may also mention that Erasmus Wilson, Esq., has kindly promised us a report on the Dermatological Museum in Royal College of Surgeons. From the value of the specimens in this Museum, we are certain that the report will be most interesting.

THE STUDY OF CUTANEOUS DISEASES.

Dermatology is now recognised as an important branch of medicine. To treat diseases of the skin successfully, the practitioner must be an accomplished physician and pathologist. Dr. Fagge informs us (Guy's Hospital Reports) that it is "too much forgotten that the study of cutaneous affections approaches in some respects nearer to post-mortem work than to ordinary clinical

observation. The Dermatologist has not to deal with the patient's statements, nor even with the finer results of physical investigation, but to note for himself the visible colour and texture of the organ diseased. But there is this important distinction—that whereas the condition of the deeper parts can be inspected only when life has ceased and circulation is suspended, the skin may be watched for days and years together, and every change in the state of its vascular supply attracts and compels notice. It is a familiar fact, that many skin diseases scarcely leave any marks of their presence in the dead body. A man may have had a psoriasis or an eczema for years, with intense reddening of the surface, but after death one can hardly distinguish the affected from the unaffected parts. The same may, indeed, be said of all visible mucous surfaces. Every one that has made a post-morten examination of a case in which tonsillitis had existed must have been struck with the want of correspondence between the appearances seen during life and those discoverable after death."

Within the last five or six years most of the London Hospitals have added to the existing arrangements, departments for the treatment of skin diseases, and Dermatology is now beginning to be recognised at the examining boards. The chief object of this Journal will be to increase the interest in this important branch of medical science; and it will be our efforts, supported by the profession, as we hope to be, to make the subject of skin diseases of common interest, and familiar to all. If our Provincial Schools of Medicine will follow the example of the London Hospitals, greater and more general progress will be given to those studies which have been previously looked upon as specialities, and medical science in its widest sense will be the gainer.

PANCREATINE.

We have for some time been trying pancreatine in several cutaneous affections, accompanied by impaired digestion, with the best results. Our readers are aware that this remedy was introduced by Dr. Dobell, of London. We believe it to be superior to pepsine. In the British and Foreign Medico-Chirurgical Review, January 1870, page 257, we find the following:— "Bernstein examined the secretions of the pancreas as it was discharged from persistent fistulæ of the duct. The fluid pos-

sessed all the digestive attributes of the pancreas; and M. Bernstein holds the opinion of Bernard, that only the tenacious secretion flowing from fresh fistulæ presents the properties of the healthy juice, is erroneous. It has long been known that the secretion is induced by, or increased during the act of digestion."

CALLOSITIES.

Dr. Damon, of Boston, in his work on Structural Lesions of the Skin, reviewed in our last number, gives the following table of the situation, number and form of the callosities produced in the different arts and occupations taken from M. Vernois' work. Some of them are peculiar to French artisans, while others are common to persons engaged elsewhere in these occupations:—

RIGHT HAND.

Occupation.
Laundress
.. The entire internal surface of the hand.
Burnishers
.. Fingers and internal surface of the hand.
Chemists
.. Extremities of the thumb and the index.
Shoemakers
.. Fingers and furrows of the hand.

Wood Carvers .. Radial border of the index.

Gilders of Metals .. Fingers.

Cabinet-makers .. Internal surface of fingers and hand.

Oyster Women .. Palmar surface (thenar and hypo-thenar eminences)
Clerks (copyists) .. The first three fingers and the cubital border of

the hand.

Printers (compositors) . . Index and thumb.

Joiners .. Internal surface of the hand and the fingers.

Polishers of Glass ... Thenar eminence.

Nut Crackers .. Palmar surface.

Nut Crackers .. Palmar surface.

Players of the Violin .. Tip of the fingers.

Painters (with the palette) Fold between the thumb and the index.

Locksmiths ... Thumb and index, ridge between the thenar and hypo-thenar eminences.

BOTH HANDS.

Engravers of Jewels .. Palmar surface of right, index and thumb of left.

Sculptors in Wood .. Palmar surface.

Drummers .. The first three fingers.

FORE-ARMS.

Washerwomen (in tubs) Cubital surface of both.

Carders of Mattress hair Radio-cubital surface of left.

Curriers ... Cubital border, left (most ordinarily).

Nuns .. Cubital border of both.

Sawyers .. Dorsal surface of both.

ELBOWS.

Engravers of Jewels .. Both.

THIGHS.

Professed Horsemen .. External superior and internal surface of both.

Shoemakers .. Anterior surface of left.

Harpists .. Idem.

Players of the bass violin Internal and middle surface of both.

Players of the organ .. Externally and the right.

BOTH KNEES.

Workers in bitumen, washerwomen who wash by the river-side, slaters, fumists, those who inlay floors, chimney sweepers.

BOTH LEGS.

Tailors .. Upon the head of the fibula in front of the malleo-

lus externus.

FEET.

Porters .. Planter surface of both in form of crescent.

Tailors .. Head of the fifth metacarpal bone outside.

STERNUM.

Wheelwrights, shoemakers With depression of the epigastric region.

Brushmakers, curriers, locksmiths, coopers, turners Of variable extent without real depression.

THORAX AND SHOULDERS.

(A) Anterior and Superior Surface.

Lacemakers, litter-bearers water-bearers, those who tow rafts of wood On the lateral portions, with brown appearance of the skin, and upon the shoulders.

(B) Superior and Posterior Surface.

Rag pickers, porters (car-) The whole superior surface of the back in variable riers) ... degrees, and with very brown tint of the skin.

LUMBO-ABDOMINAL REGION.

Rag pickers .. Three callosities situated in the form of a triangle.

Pedlars .. In the form of a thick circular band.

Chimney Sweepers .. Towards the lumbar region especially.

SACRUM AND ISCHIATIC TUBEROSITIES.

Professional Horsemen, young recruits, tailors, &c. Of variable extent.

HEAD.

Porters upon the head.. On the vertex.

The course and duration of a callus depend upon the extent and continuance of the friction and pressure. When these causes are removed, the skin ceases to become hypertrophied, and may in time return to its normal condition.

PURE AND UNBRANDIED WINES.

Through the courtesy of Mr. George Scott, Victoria Street, Belfast, agent for the firm of Messrs. H. R. Williams & Co., Lime Street, London, E.C., we have had the opportunity of inspecting samples of pure and unbrandied wines, and which appear to us to be of the best description. In these days of cheap wines, it is important to know where one can obtain a genuine article at a reasonable price.

NEW REMEDIES.

IODIZED COLLOID.—We beg to direct the attention of the profession to a preparation of collodion and iodine, made by Mr. William Collins, chemist, High Street, Belfast, as a useful application in dermatophytic diseases. This remedy is intended to fulfil two important objects in the treatment of vegetable parasitic diseases of the skin, viz.:—1st, To exclude the air by means of the collodion contained in the preparation, by which object the growth and development of fungi is, at least in a great measure, arrested; and, 2nd, by the action of the iodine, the spores are prevented from germinating. Moreover, the diseased skin is stimulated to take on a more healthy action.

EUTHRIXINE is the name given by Messrs. Ball & Co. to a preparation of acetic acid, cantharides, &c., for encouraging the growth of the hair. The preparation is perfumed with various scents, and is of decided value,—in this respect differing from the hundred-and-one useless lotions, cosmetics, &c., recommended for the same object.

ERYTHEMA PAPULATUM ET TUBERCULATUM.

Dr. Silas Durkee, of Boston, U.S., has sent us a short pamphlet on the above-mentioned disease. The case recorded occurred on the person of a female aged 54 years. She had never been pregnant, and never suffered from any uterine disease. The catamenia ceased at the usual period. At the time of observation the disease had existed for about ten years, commencing as a bright scarlet-coloured eruption, appearing upon the face, trunk, and extremities, "producing but little inconvenience of any

kind, excepting a moderate degree of heat and itching until the expiration of about ten months, when a succession of small bunches or lumps appeared and soon terminated in 'sores,' which were compared to the pustules of small-pox." In 1856, the erythema began to show itself, appearing first around the knee-joint in the form of hard, red, solitary papules, slightly raised above the adjacent integument, and of a round or oval figure. In a few weeks the chin and front part of the neck became affected, and in about eight months the extremities were similarly attacked. They were hard to the touch, and on being pressed upon by the finger the colour disappeared, but returned rapidly on removal of pressure. The disease increased in extent, the cuticle beginning to exfoliate from the summit of many of the tubercles, the largest specimens of which were observed on the front of the right knee, some of which were hard, whilst others were soft and elastic to the touch. From the denuded surface serous exudation escaped, and the patient was unable to walk for any lengthened distance owing to feebleness. Such are the most interesting points in the above-mentioned case, which is recorded with great accuracy. Dr. Durkee considers erythema papulatum to be occasionally fatal, and informs us that in four cases which he has observed there was first an eruption of erythema papulatum, which lasted for several months and then disappeared, the patients enjoying good health for a period varying from eighteen months to three or five years. In each instance there was a second invasion of the disease, which ultimately passed into the more grave tubercular form, and in three instances terminated in death.

There is another variety of erythema upon which we wish to say a few words. However, we would first remark that Erasmus Wilson considers erythema to be a pathological hyperæmia:—

"The nerve control over the vessels is lost, the cell elements also are implicated, these imbibing a large portion of exuded fluid, giving rise in some cases to distinct swelling. In erythema, the character of the redness, its superficial nature, and the tendency to edema, are the important features. * * * The tumescent forms, in which the sub-cutaneous tissue is involved in the inflammation, as in erythema tumescens, papulosum, tuberosum, and nodosum, ranked by Hebra under the general term E. polymorphicum or multiforme."—Lancet, Feb. 12th, 1870.

ERYTHEMA NODOSUM is usually confined to the anterior part of the legs, although it may occur in other situations, appearing as one or more large oval patches parallel to the tibia, which rise into painful protuberances resembling nodes, hence the name. This variety of erythema occurs generally in young people, usually females who are hard worked. We have frequently observed erythema nodosum in factory workers, especially those employed in the spinning-room. The disease is usually ushered in by well-marked febrile disturbance of the system, pains in the back and legs, loss of appetite, &c. The eruption is at first red, but, as the affection declines, the colour changes to yellow, green, &c. These appearances are due to effused blood. In erythema nodosum, not only the skin but also the sub-cutaneous cellular tissue, in well-defined patches is implicated. Indeed Hebra states that this species of erythema differs from the other varieties in its seat, course, and symptoms. "Of all the inflammatory diseases of the skin," he says, "erythema nodosum produces the most remarkable hæmorrhage, each wheal-like elevation, characteristic of this disease, having in its centre a hollow filled with blood." It is well known that, as the eruption declines, the affected part assumes various shades of colour. The skin often desquamates in fine scales. The escape of blood mentioned above may occur without the capillary vessels being ruptured. Probably vaso-motor nerve paresis may have something to do in causing the protuberances. The causes of erythema nodosum are not clearly ascertained. Dr. Tilbury Fox believes that this affection is often associated with chorea and rheumatism, these two diseases being intimately connected. In a few cases which we observed, occurring in young girls from 16 to 19 years of age, chlorosis was present, and when steel and quinine were prescribed, they became rapidly well.

We cannot conclude this short notice without mentioning a case which a few months since was under observation. The patient was employed in the spinning-room of one of the flax-mills of this town. She was obliged to stand all day in a hot and relaxing atmosphere, and, as is usual with the workers, wore no stockings. Being a strong, healthy country girl, the work did not tell on her till recently, when she became pale and anæmic, also suffered from dyspepsia. The erythema was ushered in by a smart attack of feverishness, pains in the limbs and back, quick pulse, headache, shivering, &c., after the subsidence of which out came several bright red-coloured patches on the legs, which rapidly passed into protuberances exceedingly painful. A

unique feature in this case was ulceration. Hebra denies that these nodular elevations ever suppurate. We have never heard of their doing so; but in the case under notice, after the eruption began to decline, the epidermis exfoliated from off several, which rapidly ran into small, round, painful, unhealthy-looking ulcers, from which a secretion of nasty sanious looking matter issued; after the healing of the ulcers, which was very difficult, the patient suffered greatly from neuralgic pains in the limbs. The treatment all along was large doses of quinine, morphia to allay irritation, and resin ointment to ulcers, a fine bandage being applied to the legs. In our present number will be found some interesting remarks by Dr. Spender on this disease.

ON THE SPECIAL FUNCTION OF THE SUDORIPAROUS GLANDS.

Dr. Willis, of Barnes, has published an interesting monograph on "The Special Functions of the Sudoriparous and Lymphatic Systems," from which we extract the following remarks. says:-" Is the diminution or suppression of the perspiration, sensible and insensible, necessarily and invariably followed by a rise in the temperature of the body?" It ought to be so, Dr. Willis thinks, if the views of the cutaneous function generally entertained are well founded. In febrile and inflammatory diseases, it is familiarly known that there is an increase of temperature, and along with this, as is commonly said, a suppression of the cutaneous exhalation. That there is a diminution in the exhaling function of the skin during the hot periods of febrile diseases is certain; to assert that there is a total suppression, is an error, for a cold polished plate of metal brought close to the most burning skin will always become more or less dim. Does the same result follow when such a plate is approximated to the dry and shrivelled skin observed in the rigour that so generally precedes attacks of acute disease? and is the internal as well as external temperature then depressed? In certain hysterical and cataleptic attacks, accompanied by faintness and feebleness of the heart's action, the external temperature of the body certainly falls much below the natural standard. In general anasarca, where the cutaneous perspiration is more completely suppressed, perhaps, than it is in any other disease, there is always an icy state of surface. Again, in scleroderma (in which disease the proper function of the skin is seriously implicated), one of the first features

of the complaint is the loss of vital warmth, which begins early, and goes on in fatal cases increasing until life is extinct, when the internal as well as external parts of the body have been found 10°, 15°, 20°, and even 23° F. under the standard. Dr. Willis then proceeds to give some observations on animals whose bodies had been covered with an impervious varnish, and in which death occurred, accompanied by a fall in temperature. The author believes that the "office of the sudoriparous system of glands is to abstract merely water from the peripheral circulation, and in the functions of that system, the end and import of which he regards as subservient to securing the conditions necessary to the return into the venous circulation of the fluids that have been shed from the arteries for the purposes of nutrition and vital endowment." Dr. Willis states on good authority, that the arterial blood contains a larger quantity of water, and is of less density than the venous or returning current, the difference being greatest where there is an abundant separation of watery fluid. This process, carried on between the arteries and veins, constitutes, in the words of our author, venous absorption, the conditions necessary to which—viz., the higher density of the blood in the veins or returning vessels than in the arteries or efferent vessels in all the peripheral parts of the body, being mainly due to the action of the sudoriparous glands.

Dr. Willis's monograph is altogether of a very interesting character. The above short *resumé* will be an indication to some extent of its bearings. We hope at some future period to have a paper on the subject from the author's pen.

IN MEMORIAM SIR JAMES YOUNG SIMPSON, BART., M.D.

SIR James Young Simpson, Bart., M.D., died on May 6th, in Edinburgh, after several weeks' illness. We take the following from the "Men of the Time:"—"Sir James Young Simpson, Bart., M.D., Professor of Midwifery in the University of Edinburgh, and the discoverer of the anæsthetical properties of chloroform, born 1811, at Bathgate, Linlithgowshire, commenced his professional career as assistant to the late Professor Thomson. The same strength and energy which characterised the outset of his career have signalised his laborious life and his rapid rise to eminence. In 1840, he was appointed Professor of Midwifery in the University of Edinburgh, and he introduced chloroform in

1847. Since that time, in addition to other professional occupations, he has been engaged in demonstrating, by the results of an immense experience, the safety of an anæsthetic in midwifery. In 1849, Dr. Simpson was elected President of the Edinburgh Royal College of Physicians; in 1852, President of the Medico-Chirurgical Society; and in 1853, Foreign Associate of the French Academy of Medicine. In 1856, the French Academy of Sciences awarded the 'Montyon Prize,' of 2,000 francs, to Dr. Simpson, for the benefits which he had conferred on humanity by the introduction of anæsthesia by chloroform into the practice of surgery and midwifery; and a short time before he received the knighthood of the Royal Order of St. Olaf from King Oscar of Sweden. Sir J. Simpson's professional writings are numerous, and are known throughout the world, having been translated into nearly every European language. In January, 1866, he was created a baronet, in recognition of the service he had rendered by the discovery of chloroform; and he received the honorary degree of D.C.L. at Oxford the same year. He was President of the Department of Health in the Social Science Congress at Belfast in September, 1867."

Miscellaneous Memoranda.

THE DOCTRINE OF LIFE.—Prof. J. H. Waters, Prof. of Physiol., Pathol., and Clin. Med., in the Missouri Medical College, claims to have been the first to announce the now largely accepted theory of vitality. In the St. Louis Medical and Surgical Journal, he argues at great length the following positions:--"1st. From my thesis, published in 1851, and from a series of articles subsequently published in the St. Louis Medical and Surgical Journal, I shall reproduce sufficient to show my enunciation and elucidation of the position that life and decay are reciprocal; that the form of organization determines the direction of those peculiar actions called vital, while those same actions are reciprocal with a 'downward' process, as in machines of art. 2nd. From the memoir on the 'Mutual Relations of the Vital and Physical Forces,' published in the 'Philosophical Transactions' for 1850, and from editions of his Physiological works, subsequently published up to 1864, I shall quote sufficient to show that Dr. Carpenter, during that period, held that the 'vital forces' are 'correlative' with the physical, and with each other, and that in the elaborate discussion of this doctrine, referred to by him, he maintained that these 'vital forces' thus 'metamorphosed' from 'heat and light' by the organism, as the 'material substratum,' are the cause both of the motions and of the speciality of the vital motions: thus making his vital

forces abstract unities, yet differing from each other, and susceptible of being metamorphosed! 3rd. From his writings in 1864, I will quote sufficient to show that Dr. Carpenter, in these 'recent works' annunciates the doctrine that the 'germ' or 'organism' gives the 'directive agency,' while 'decay' or destructive metamorphosis gives the 'motor' to the vital motions. 4th. I shall show that this late position of Dr. Carpenter is an abandonment of his 'correlation theory,' as developed in 1850, and for the next fourteen years; and that it is in many respects 'identical' with the theory which I published in 1851, and subsequently."—Half-Yearly Compendium, 1869.

DEATH.—In many acute diseases, such as typhus, erysipelas, and the exanthemata, the act of dying is less painful, on account of the coma which usually precedes it. Of the acute inflammations, death from carditis is attended with most suffering. The patient is anxious, fully aware of his danger, in a high state of excitability, and begs constantly for aid. Even large doses of narcotics do not serve to soothe him. Severe cases of pneumonia of both lungs are usually terminated in a similar manner.

THE ACARIAN FURROW presents the appearance of a curved dotted line under the surface of the epidermis, varying in length from the thirtieth to the third of an inch, and assuming the form of a comma, of a horse-shoe, or of the letter S. It may be either white or of a greyish colour. At one extremity of the furrow is a minute rounded, opaque, white elevation, the "acarian eminence;" from this, with a little address, the acarus itself can be extracted on the point of a pin. It is, however, easy to detach small pieces of epidermis of about the size of an acarus where no acarus is present, and such may often be mistaken for the insect. The itch-mite is distinguishable from fragments of epidermis by several tests. Of these, the most unequivocal is to place the suspected atom under the microscope, when the well-known anatomical characters of the acarus (if acarus it be) at once reveal themselves. But the microscope is an instrument that we might not always have at hand, and in its absence there are other tests which are scarcely less certain. Thus, if the point of the pin on which the supposed acarus has been extracted is held up to the light, the particle, if an acarus, appears to be semi-transparent and plump; if a piece of epidermis, it would be opaque and shrivelled.—Medical Circular.

Tobacco as the Cause of Gray Hairs and Baldness.—In the Pacific Medical and Surgical Journal for June, 1868, Dr. D. B. Hoffman comments upon the early baldness and gray hairs of the male sex in California. He says:—"While reflecting over this matter, a very singular circumstance occurred in my practice. A gentleman under forty years of age, and a patient of mine, who had been in the habit of using tobacco to excess for many years, and who had been for the last five or six years both bald-headed and gray-haired, found it necessary a few months ago to quit the use of tobacco entirely. It was, of course, a hard struggle at first, for it makes no difference how firm a man may be, if he once becomes a slave to tobacco, whiskey, or opium, it is hard, very hard work for him to recover his liberty—to be able to say, 'I have conquered;' and very few succeed in doing it. However, he finally did it, and since that time has become a changed man in more than one respect. In the first place he has entirely recovered his health, which was bad while

he used tobacco; he also recovered entirely from his baldness, and his 'gray locks' have been replaced by an unusually luxuriant growth of natural hair, of as fine a black hue as one could wish to see; he has also lost that sallow, bees-wax hue of skin and sickly paleness of colour which 'slaves to the weed' so generally have. All of this might be expected as a very natural result, except the growth of hair and its change of colour, which in this case at least has occurred as one of the results of leaving off a noxious habit. The question now occurs—Is this the cause of the prevalence of bald heads and gray hairs on so many men under forty years of age, in California? Let us inquire. Tobacco is a sedative narcotic. When used to excess it produces numerous untoward symptoms, among which are debility of the nervous and circulating functions. On these depend the growth of all animal organisms. If these functions are impaired, so is the growth of the body, and all belonging it. The hair is only a modification of the epidermis, and consists essentially of the same structure as that membrane. It has a root, shaft, and point, and like all other organs of the body, requires for a natural, healthy, and vigorous growth a healthy state of the nervous and circulating systems. If tobacco impedes the circulation, and prevents the free and natural supply of healthy nourishment reaching its destination, which it evidently does, it is a cause which results in disease and death of the hair. The yellow and waxy state of the skin, always found in those who use tobacco to excess, is easily accounted for in the same way. The debility which it causes in the nervous and circulating functions, prevents then the organs from being duly nourished, thereby causing their disease and death."

IODIDE OF POTASSIUM IN ITCH.—Dr. H. B. Spencer, of Oxford, sends the following note:—"I wish to call the attention of the profession to the great utility of iodide of potassium ointment in the treatment of scabies. This disease has prevailed very extensively in Oxford lately, and I have been over and over again requested to cure it without giving sulphur ointment or anything that would smell or stain. Iodide of potassium ointment fulfils these conditions completely, and it has been in my hands a cure as certain as sulphur ointment, There is no need for the patient to go to bed, but it should be well rubbed in all over the body, night and morning, for a few days. Dr. Fox mentions this use of it in his work on Skin Diseases, but it is not named for this purpose in Dr. Ringer's work on Therapeutics, nor is it so generally known by the profession as it deserves to be."—The Practitioner, September, 1869.

Treatment of Elephantiasis Arabum by Ligature of Vessels.—Dr. G. Fischer collects twenty-one cases in which this treatment was adopted. In four cases the external iliac was tied; in fourteen the femoral (in one of these cases both femorals); in one the tibialis antica; and in one case the two common carotids. There were eleven cures (but only four of these persisted for a year or more); two were improved; seven were failures, in one of which digital compression ultimately proved successful. Of the complete failures there was one with no result, three with relapses, one case of gangrene, and two cases (both fatal) of pyæmia. Fischer explains the therapeutic effect of the ligature by its removal of arterial pressure; it is this pressure which prevents the absorption of effused matters, and keeps up

the swelling, and its removal allows the natural curative processes to come into play. How rapidly these may effect a cure was shown by cases in which a diminution of 8, 10, or 13 centimetres in the size of the swellings was observed the fifth day after ligature. Fischer thinks that the first hopes excited by the ligature treatment were excessive, and that it is attended with greater danger than was then supposed. For anæmic, cachectic patients, it is best to try methodical compression first. (Virchow's Arch. Centralblatt, 17 Juli.)—Ibid.

Dust and Disease.—Nearly every one is familiar by this time with Professor Tyndall's recent lecture on "Dust and Disease." He began by illuminating the dust floating in the air by means of the electric light, and proceeded to prove that the particles therein consisted of minute organic matter. In a series of experiments, various flames known to be smokeless, such as that of alcohol and hydrogen, were placed beneath the beam of dust illuminated by the electric light, when dark spaces around those flames became immediately visible. These dark spaces the Professor showed to result from the organic matter in the atmosphere being consumed, and the air arising in vertical currents free from dust. What seemed to be smoke at first, therefore, was really "the darkness of shallow space." We extract the following from the Medical Mirror, February, 1870:—"The facts made known by Professor Tyndall, in the remarkable lecture recently delivered at the Royal Institution, stand in a more immediate relation to medical science than any physical investigations brought forward for a considerable time. That the lower strata of the atmosphere contain under all circumstances a greater or less quantity of suspended particles has long been known; but the novel feature of Professor Tyndall's remarks consists in his discovery that the floating matter is pre-eminently of organic origin, and not, as was generally believed, of inorganic particles chiefly derived from the disintegration of the mineral substance of soil, rocks, &c., and drifted about by air-currents. The experiments which Professor Tyndall described, and some of which were exhibited before the audience, are perfectly conclusive as to the organic constitution of the floating dust which we draw into our lungs every hour and minute of our lives. The wonder is, really, not that we should from time to time suffer from the presence of this matter, but that so small a portion of it should be so deadly to man. This led the lecturer very naturally to fermentation, and alluding to the various theories of it which have preceded the researches of Pasteur, he says of him: - 'He proved that the so-called "ferments" are not such; that the true ferments are organised beings, which find in the reputed ferments their necessary food. Side by side with these researches and discoveries, and fortified by them and others, has run the germ-theory of epidemic disease. The notion was expressed by Kescher, and favoured by Linnæus, that epidemic diseases are due to germs which float in the atmosphere, enter the body, and produce disturbance by the development within the body of parasitic life.' The following remarks may be of some practical value to surgeons; after alluding to the consequences of imperfect disinfection and the spread of lingering germs, Professor Tyndall says: - 'Surgeons have long known the danger of permitting air to enter an opened abscess. To prevent its entrance, they employ a tube called a cannula, to which is attached

a sharp steel point called a trocar. They puncture with the steel point, and by gentle pressure they force the pus through the cannula. It is necessary to be very careful in cleansing the instrument; and it is difficult to see how it can be cleansed by ordinary methods in air loaded with organic impurities, as we have proved our air to be. The instrument ought, in fact, to be made as hot as its temper will bear. But this is not done, and hence, notwithstanding the surgeon's care, inflammation often sets in after the first operation, rendering necessary a second and a third. Rapid putrefaction is found to accompany this new inflammation. The pus, moreover, which was sweet at first, and showed no trace of animal life, is now feetid, and swarming with active little organisms called vibrios. Professor Lister, from whose recent letter this fact is derived, contends, with every show of reason, that this rapid putrefaction, and this astounding development of animal life, are due to the entry of the germs into the abscess during the first operation, and their subsequent nurture and development under favourable conditions of food and temperature."

ICHTHYOSIS.—Dr. H. Fagge has contributed a paper on this disease. (Guy's Hospital Reports.) He thinks that the cellular lining of the hair-sacs is greatly increased in thickness, and proceeds to say that "by some writers the absence of redness and inflammation is made a cardinal point in diagnosis of ichthyosis. My own observations, on the contrary, lead me to believe that parts of the skin which are the seat of ichthyosis, at any rate in its less severe forms, are particularly liable to become inflamed. This inflammation shows itself in various degrees; the commonest grade of it is when a part ordinarily affected with simple xeroderma becomes red, and its thickened cuticle begins to peel off in large lamellæ. Infants who are the subjects of ichthyosis are frequently brought to one in this condition. Under the use of vinum antimonale internally and emollient applications locally, amongst which I have found the glycerinum amyli very valuable, the redness and scaliness are after a time removed, and the skin then subsides into a condition of ordinary xeroderma." Infants distinguished by the odd title of "Harlequin Fœtus" are sometimes met with, in whom the skin is cracked into symmetrical fissures, evidently due to imperfect nutrition.

Syphilis.—We have found very few cases of secondary syphilis that have not yielded in a very satisfactory way to a combination of 1-8th of a grain of perchloride of mercury, 5 to 15 grains of iodide of potassium, and a scruple of chlorate of potash taken three times a day in some bitter infusion, such as gentian or quassia. The addition of the chlorate of potash appears to us to do more than merely prevent salivation. From a number of experiments with it, we are convinced that it increases the efficacy of the mercury, so that a small dose produces a more decided effect when taken along with it."—Glasgow Medical Journal, No. 3.

Keloid.—Mr. Hutchinson has recently had under his care two cases of extreme interest from a clinical point of view, as they presented typical examples of the two forms of keloid disease associated, the one with the name of Alibert, and the other with that of Dr. Addison. The subject of Alibert's keloid was a girl about five years of age, who had been burnt severely over the right shoulder, the front of the neck, and the upper extremity,

and also less severely over several other parts of the body. The cicatrices resulting from these injuries had been converted into the irregular patches and thickened buttons of indurated tissue so characteristic of this disease. Mr. Hutchinson, in some clinical remarks upon this case, stated that the keloid of Alibert was a fibroid growth of a cicatricial tissue, and frequently affected the scars caused by burns and scalds, and those left after an attack of small-pox. It was entirely a local affection; whilst the keloid of Addison, on the other hand, which always grew from healthy integument, and never from a cicatrix, was a constitutional disease, and probably some form of neurosis. There was no analogy between the two diseases, except that each presented similar elevated, smooth, and pinkish patches of indurated tissue. The keloid of Alibert never contracts, and thus differs from a cicatricial tissue, which, where formed after extensive burns or scalds, is characterised by this property, and gives rise to great deformity. This form of keloid generally sends out irregular outgrowths from the circumference of its patches, and in most instances is very troublesome to the patient on account of its extreme irritability. It is unadvisable to remove the diseased patch with the knife, as the keloid growth always returns in the scars formed after the operation. Mr. Hutchinson has found from his experience that there is invariably a tendency in this form of keloid to diminish in extent, and in many instances to disappear altogether. In some cases these favourable changes occur more rapidly than in others, but the subjects of the disease may always be assured that sooner or later it will come to an end. The second case in the surgical wards of this hospital is one of Addison's keloid, which has been described also under the names of morphea alba and of scleroma. The patient, who is a lad about eight years of age, presents very markedly in the lower limbs the hide-bound condition caused by the contraction of hard, dry, parchment-like integument. Symmetrically arranged over both scapulæ are indurated nodules of the disease. This form of keloid differs from that of Alibert in its tendency to contraction, its evident dependence upon some constitutional affection, and its frequent distribution along the course of nerves.—Lancet, Jan. 22, 1870. [We had a short time since two cases of keloid under treatment. In one, the disease occurred on the chest of a female aged 58, immediately under the left clavicle. It arose from an injury. In this journal, vol. viii. page 73, will be found a valuable review by Mr. Milton of the Cutaneous Pathology of Keloid. Papillary growths, tumors, and warty ulcers arising out of old cicatrices, have been occasionally confounded with keloid. When the warty growth from a scar is of long standing and coarsely warty, with vascular knotted and grouped large papille, the probability is that it is cancerous, as mentioned by Mr. Paget. A case of this kind is at present in the Belfast Charitable Infirmary, the disease existing in an old scar on the heel, resulting from a wound received thirty years ago, by a railway accident. Some of the growth, after having been examined with the microscope, exhibited numerous cancer cells, &c.-ED. JOURNAL OF CUTANEOUS MEDICINE.

ACNE ROSACEA WITH HYPERTROPHY OF THE Nose.—Guibout (Annales de Dermatologie et de Syphilographie, No. 2, 1869) discusses the subject of acne rosacea with hypertrophy of the nose, and relates the case of a man, 45 years

of age, who had used every form of external and internal treatment with no success. From six to ten incisions were made into the nose every two, three, or four days; the bleedings were encouraged from five to ten minutes; then, lint soaked either in Goulard's lotion, or in a concentrated ammoniacal solution, was applied with some pressure; the application was kept moist. With this treatment the hypertrophy of the nose rapidly subsided, due to adhesion of the walls and obliteration of the distended blood-vessels. This treatment was suggested by Hebra, five years ago.

TINCTURE OF ACTEA RACEMOSA.—This American remedy is coming into general use in Great Britain. It is now prescribed for lumbago, sore throat, to allay the cough of phthisis, to produce uterine contraction, in headache, suppressed menses, and in pleurodynia. It is a good anodyne, and bears a considerable reputation in the United States as a local remedy, used as a decoction for scabies.

Onychomycosis.—Dr. C. H. Fagge has published a paper on some affections of the nails (Guy's Hospital Reports), from which the following is taken:-"The growth of a vegetable parasite in the substance of the nail appears to occur under two distinct conditions, which have, however, been confounded together by some writers, including Neumann. 1. The first of these conditions occurs in patients suffering from some parasitic disease of the scalp or body generally, in whom one or more of the nails becomes secondarily affected. This is most frequently observed in cases of favus, as has been described by Bazin, Anderson, and others. In the 'Transactions of the Clinical Society' I have given accounts of three such cases. One of these occurred in a girl affected with favus, whose case is recorded in another part of this volume; two other patients were sisters affected, the one with tinea tonsurans, the other apparently with t. decalvans. The most important point which I endeavoured to establish in the paper above referred to is, that in favus of the nail the growth of the fungus takes place in a manner different from that described by Bazin, who has generally been followed in this matter by subsequent writers. According to Bazin, the favus fungus is developed on the under surface of the nail, and may at first be seen through its transparent substance. Gradually the nail becomes thinned by it, and is subsequently perforated, when the parasitic mass assumes more or less the character of an ordinary favus cup. In my case, on the other hand, the fungus lay within the nail substance, and was distinctly interstitial, from an early period. It gave a uniform yellow colour to the part of the nail affected by it, and this gradually became more extensive, encroaching on the nail more and more towards its root. Models of these cases were made by Mr. Towne, and have been placed in our museum. 2. The second condition under which the nails become affected with a vegetable parasite was first described by Meissner, and subsequently by Virchow. Meissner's case was that of a man over eighty years old, in whom all the nails (except that of one forefinger) were broad, thick, strongly convex, resembling claws, and striped of a yellowish-white or brown colour. They were movable on their beds, and could be split like The affection was only noticed post-mortem. In Virchow's three cases, again, the disease was observed only in the dead body; the nails affected were all toe-nails. With the exception of a case described by

Neumann, I am not aware of any previously recorded case in which a parasitic affection of the nails has been found during life in a patient not suffering from any parasitic disease elsewhere. Neumann's case is that of a girl, æt. 26, who for twelve years had a disease of the nails, which were thrown off five or six times every year, and replaced by new ones. The affected nails were rough, of a dirty yellow colour, and projected like thick claws over the finger-ends. They were easily movable on their beds. Some presented whitish transverse lines; others yellowish spots in and under their substance. The girl had no disease of the skin beyond eczema of the leg. The nails affected were all those of the right hand; those of the first, third, and fourth fingers of the left hand; those of the first three toes of the left foot and of one toe of the right foot."

TREATMENT OF LUPUS—With regard to outward applications, I believe that their principal value is restricted to excluding the air, and that those are the best caustics which effect this most certainly and with the least pain. Perhaps the nitrates achieve this result more certainly than any other means. When the patient can remain indoors, and does not care about the dark stains caused by it, the nitrate of silver may be used; it is an excellent remedy, either solid or in saturated solution. In the lupus of children, previously spoken of, even a very weak solution can scarcely be borne. Here it is not a bad plan to use a solution of sulphate of copper (cupri sulph. gr. vi., aquæ rosæ z ii.) for some time till the sensibility has become deadened. The acid nitrate of mercury is a very valuable preparation, and has the advantage of not forming so dark a crust. It is peculiarly suited for small, not very sensitive ulcers and tubercles. It may be brushed with a glass brush over the part, and should be used at first diluted with water till the full strength can be borne. When applied, a basin of water should always be at hand, and so soon as ever the pain begins to be felt the surface should be freely washed. The yellow nitrate of mercury may also be used in the form of ointment made with the lard as prepared by Mr. Squire. It is chiefly adapted to those cases where there is only slight or superficial ulceration, and to the lupoid form of sycosis. It answers very well for those patients who cannot well have anything applied which produces a visible mark. These are the only external means in which I feel any confidence, and even these I look upon solely as so many aids to external treatment. If they are relied upon, both patient and surgeon must lay their account to the possibility, nay, even the great probability, of a relapse. Mr. Hunt, who has had a very extensive practice in these diseases, says the practice of using caustics is not only barbarous but useless, and M. Rayer distinctly says that whatever caustic may be used it must always be repeated, often twenty or thirty times. Dr. Parkes, a most able and careful observer, entertains a very indifferent opinion of their value. It is true that views utterly opposed to these have been held by very good surgeons. Mr. Liston, for instance, thought that local treatment was alone to be depended on, and always used the chloride of zinc unsparingly. Mr. Gay, too, has seen the best results from the use of the pernitrate of mercury in lupus exedens. Professor Bennett seems to entertain a similar view. M. Cazenave thinks there is nothing like biniodide of mercury suspended in oil; but he admits that its action is very

painful. Professor Hardy also clings to the biniodide. Mr. Wilson uses caustics, though he expresses himself very guardedly. Dr. Hillier eulogizes the iodide of starch, recommended by Mr. Marshall; he says its use is almost unaccompanied by pain. Dr. Frazer says that whatever medicine be given, local treatment is still of primary importance. Dr. Danzel, of Hamburg, looks upon solution of hydrochlorate of gold as more powerful and less painful than other caustics. Still it is clear, from what he says, that its operation is most severe. He uses a solution from half a scruple to a scruple in a drachm of distilled water, and works it deep into the bed of the ulcer by means of a fish-bone or glass style. Hebra relies upon the solid nitrate of silver, freely applied, and iodized glycerine; the latter being principally employed in the erythematous form. Cod-liver oil is almost his sole internal remedy.—"On the Treatment of Lupus," by J. L. Milton.

Notes on the Spas of Ireland.—In compiling the following "rough notes," Dr. Knox's interesting and instructive work on "Irish Watering Places" has been laid under contribution. The first spa on our list is that of Lucan. The following is an analysis of the water:—

Muriate of Magnesia,	• •	4 0	0 0	• •	14.50
Sulphate of Soda (dry),	• •	• •	w 0		24.54
Muriate of Soda,	• •	• 5	• •		
Sulphate of Lime,	• •	• •		• •	12.40
Carbonate of Lime,	• •	• •	• •	4 0	26.00
Loss,		• •	• •	• •	•62

Dr. Knox states that its gaseous contents are very evanescent and are carbonic acid gas holding in solution carbonate of lime and a quantity of sulphuretted hydrogen. It resembles Harrogate, though less disagreeable in taste and smell. It acts medicinally as a tonic and stimulating diaphoretic. Not far from Lucan is the birth-place of the Duke of Wellington. At Leixlip there existed a celebrated spa, but which has fallen into disuse. Leixlip is not very far from the town of Drogheda. The antiquarian will, in this neighbourhood, find the ruins of Mellifont Abbey, and also of Monasterboice; the latter is situated between Drogheda and Dunleer. The churchyard contains the remains of two chapels, two stone crosses, a broken one, and a round tower. One of the crosses is about eighteen feet high, and is said to have been sent from Rome; it is called St. Boyne's cross. On the other is an inscription in old Irish characters, which, it is asserted, refers to Murdach, King of Ireland, who died A.D. 534. The round tower is 110 ft. high. Mallow possesses a thermal spring, rising from the base of a limestone rock. The water is of equal temperature, and little affected by the state of the weather. Ten thousand grains, evaporated to dryness, left a pale fawncoloured residuum, weighing 2.01 grains, consisting of—

```
Muriatic Acid.
Sulphuric Acid,
                                                                 0.18
                    . .
                              0 0
                                        0 0
                                                  9 و
Lime, ..
                                                                 0.77
                    . .
                                        . .
                                                                 0.29
Soda,
                              . .
Carbonic Acid,
                                                                 0.60
                              . .
```

This water contains no trace of iron, and would prove useful in some forms of that troublesome malady dyspepsia. Near to Mallow are the ruins of Kilcollman Castle, where Spencer wrote part of his "Fairie Queen." Castle

Connell spa, near Limerick, is nearly unknown. It is an excellent tonic and aperient. An analysis of the residuum of some of the water gave—

```
0.19
Muriatic Acid.
                                                                 a trace.
Sulphuric Acid,
                                                   . .
                                                               0.39
Protoxide of Iron, ...
                                                                 0.84
Lime,
                              . .
                                        0 0
                                                                 0.17
Soda,
                    . .
                              . .
                                        . .
                                                  . .
                                                            . .
                                                                 0.88
Carbonic Acid, ...
                              . .
                                        . .
                                                  . .
                                                            . .
                                                                 0.16
Loss and organic matter,
                                        . .
                                                  . .
                                                                 ---2.63
```

Clonmel was for many years celebrated for its spa, which was considered to be a good light chalybeate. In this neighbourhood is the Abbey of Holy Cross, which was erected nearly coeval with the Anglo-Norman invasion. The founder of the abbey was Donald More O'Brien, King of Limerick, who died A.D. 1194. The ruins on the rock of Cashel will repay a visit. Indeed in no country but Ireland is there to be found such a variety of ecclesiastical ruins, round and square towers, crypts, shrines, crosses, Druidical altars, &c. The history of the ruin is as follows:—The place was first pointed out to a herdsman of Core, King of Munster, by a heavenly messenger, who foretold the coming of St. Patrick. The King erected a palace on the spot, calling it Carrick-Phadruig, or Patrick's Rock. As he received the revenue of his kingdom here, it was named Ciosoil (subsequently changed into Cashel), from Cios, rent and oil a rock. Cormac's chapel is situated on the south side. The spa of Ballynahinch, near Belfast, is well known in the North of Ireland, and much frequented. 10,000 grains of water, evaporated to dryness, gave a brown residuum of 3.21, consisting of -

```
Muriatic Acid.
                                                                         0.18
                                  . ,
Sulphuric Acid,
                                                                         0.24
                                  . .
                                             . .
                                                        . .
                                                                    . .
Soda,
                                                                         0.35
                                                                    . .
                       . .
                                  . .
                                             . .
                                                        . .
Protoxide of Iron, ...
                                                                         0.15
                                  . .
                                             . .
                                                                    0 0
                                                        0 0
Lime,
                                                                         v·35
                                  . .
                                                                    . .
                                             . .
                                                        . .
Carbonic Acid,
                                                                         0.39
                                                                    . .
                       . .
                                  . .
                                             . .
                                                        . .
Organic Matter,
                                                                         1.55
                       . .
                                  . .
                                                        0.0
                                                                             -3.21
```

The specific gravity of the water is 1,000·539. This water is useful in many forms of chronic cutaneous diseases, dyspepsia, affections of the liver, gout, &c.—The surrounding country is extremely pretty, and a place called Saul is not very far off, where it is asserted St. Patrick was buried. The cathedral town of Downpatrick is only a few miles from Ballynahinch, and connected by rail. The County Clare possesses at Lisdoonvahna a spa of much excellence, and which is gaining in repute. Its waters contain sulphur, iron, soda, lime, and carbonic acid. Ennis is not far from this spot. Besides the preceding, several spas exist in Ireland, but have only a local reputation. Attention has consequently been only drawn to those best known and used.

SCARLATINA.—This disease has been prevalent over the United Kingdom during the last eight months. We beg to direct attention to a remedy, that in our hands has proved useful, viz.:—The peroxide of hydrogen, in drachm doses, given in water, with the addition of 10 drops of tincture of the perchloride of iron every three or four hours, for a lad, say of 16 years. If our patient was very much weakened, we allowed a little whiskey. In all cases, the body was anointed daily with fresh lard.

MINERAL WATERS OF KREUZNACH.—Dr. Stabel, in his book on these waters, gives some interesting details regarding the atmosphere of salt-works. page 143, we find as follows:--" To explain the nature of the saline atmosphere in an analytical way is difficult, because our re-agents are not sensitive enough, and generally give a negative result. However, the examination of the following facts will make the prevailing circumstances clear:-1st—In consequence of the evaporation of the brine, which constantly takes place about the works, warmth is given off. The air is therefore colder, denser, and more compact than the warmer, thinner, and lighter air of this region. A volume of air in the neighbourhood of the works contains a larger quantity of oxygen than a similar quantity at a distance from them. We consequently inhale here a larger quantity of oxygen than elsewhere. 2nd-The atmosphere about the graduation works is, in consequence of the continual process of evaporation of the brine, saturated with watery vapour in a tolerably high degree. The higher the temperature the more watery vapour is absorbed, particularly in Summer, when the maximum will set at noon, in consequence of the great warming power of the sun. 3rd-The amount of carbonic acid contained in the air about the works is diminished; it can even sink to a minimum, because the rain artificially produced by the dripping of the brine absorbs the carbonic acid. If we expose a cup filled with lime water to the influence of the atmospheric air, we see after some time a white film floating on the surface, and gradually increasing in proportion as the lime water absorbs carbonic acid, and as the latter becomes united with its lime to form carbonate of lime. In my own observation at the graduation works, I had to wait for some minutes before I could discover any trace of this formation, whilst at a distance from the works it required four days to produce the same quantity of carbonate of lime. The common salt in the atmosphere of the salt-works can rise during the hot season, when the evaporation takes place quickly, to such a degree that we can taste it readily on one's lips. In the air of the graduation works, which is denser and therefore rich in oxygen, the process of respiration will go on with more intensity, the breathing become deeper and fuller, and the air penetrates into the finest bronchia. The quantity of oxygen which in breathing is given to the capillaries of the lungs in order to oxydise the blood is greater. Hand in hand with the increased reception of oxygen, the expulsion of carbonic acid will go on. As the process of exchange and combustion is the chief source of the warmth of our bodies, the latter will be increased by inhaling the saline atmosphere; therefore, the warmth which is lost whilst living in the fresher atmosphere of the works is again restored, and protects the body from catching cold. The amount of common salt contained in the atmosphere of the graduation works is of importance. We owe to this circumstance its sanative influence on the respiratory organs, as expectoration is induced and facilitated, difficulty of breathing removed, and the cough moderated. Such happy relations will favour the use of the saline atmosphere for healing purposes. Amongst the sufferers who will find relief and recovery here, those stand in the first rank in whom it is desired to bring about a higher blood-renovation by means of an increased reception of oxygen. Hence it follows that a sojourn at the graduation works will be beneficial to feeble and delicate persons, to

those of a languid and lymphatic constitution, to rickets, to scrofula, and to individuals reduced by long illness during their convalescence. The atmosphere at the works is, furthermore, inhaled with a happy result in consequence of its greater humidity and its containing common salt, which acts in calming chronic catarrhs, bronchitis, asthma, and in the commencement of phthisis."

SOFT SOAP.—We extract the following remarks from Mr. F. Pear's book on the "Skin, Baths, and Soap":—"Soft soaps are usually made in this country with whale, seal, olive, and linseed oils, and a certain quantity of tallow; on the Continent, with the oils of hempseed, sesame, rapeseed, linseed poppyseed, and colza, or with mixtures of several of these oils. hard soap has soda for a base, so soft soap has a potassa base. Where tallow is added, as in Great Britain, the object is to produce white and somewhat solid grains of stearic soap in the transparent mass, called figging, because the soap then resembles the granular texture of a fig. The potash lyes should be made perfectly caustic, and of at least two different strengths, the weakest being of specific gravity 1.05, and the strongest 1.20, or even 1.25. Being made from the potash of commerce, which contains seldom more than 60 per cent. and often less of real alkali, the lyes correspond in specific gravity to double their alkaline strength—that is to say, a solution of pure potash of the same density would be fully twice as strong. The following is the process followed by manufacturers of soft soap on the Continent:-A portion of the oil being poured into the pan, and heated to nearly the boiling point of water, a certain quantity of the weaker lye is introduced. ebullition is kept up in the gentlest manner possible, and some stronger lye is occasionally added till the workman judges the saponification to be perfect. The boiling becomes progressively less tumultuous, the frothy mass subsides, the paste grows transparent and gradually thickens. The operation is considered to be finished when the paste ceases to affect the tongue with an acid pungency, when all milkiness and opacity disappear, and when a little of the soap placed to cool upon a glass plate assumes the proper consistency." Soft soap, as our readers are aware, is largely used on the Continent for removing sub-cutaneous infiltration, as in chronic eczema; and a solution of soap in water, or dissolved in spirit, is rubbed into the affected part with a piece of flannel night and morning.

Treatment of Sore Nipples by Nitrate of Silver.—"There are few sources of suffering, of an apparently trifling nature, productive of greater misery, than chaps, abrasions, and inflammation of the nipples, in nursing women. For a long time, I tried all the measures usually recommended, both regular and empirical, to cure them; but I never had any reason to congratulate myself on my success. I hear daily of the distress occasioned by such accidents; and having at length fallen on a method of treatment which never fails to give immediate relief, and ultimately to effect a cure, I cannot withhold it longer, lest there be even one practitioner in extensive practice who may be unacquainted with it, and so lose the benefit of a remedy which I regard as a blessing to every woman in the condition before mentioned. Indeed, under my impressions of its value, I should be culpable in not making it known. Many, perhaps, may know it; but there are certainly many who do not, much

to the loss of their puerperal and nursing friends and patients; and for the sake of these I may be excused for troubling you. My method is briefly this. Having gently, but carefully, dried the nipple, touch it freely with a sharp pencil of nitrate of silver. Be sure to insinuate the pencil into the chaps or chinks; then wash the nipple with a little warm milk and water. In most instances, the pain, though smart at first, soon subsides, and a little simple ointment, or one made with the flowers of zinc, is all that is requisite to heal the sore. I occasionally wash the nipple with a saturated solution of borax, before and after suckling the infant. Some suffer a great deal of pain from the application of the caustic; this must not be heeded. A draught, containing an opiate, such as Sol. Mur. Morph. 30 drops, soon brings relief, and the part is presently easier. Some require to be touched more than once, -nay, several times; but each succeeding time it is less painful. I have heard of a solution of nitrate of silver being tried: I can positively assert that it is inferior to the solid caustic, both in relieving and healing these painful affections."—Medical Gazette.

SENSE OF TOUCH IN THE EXTREMITIES.—The middle of the arm, thigh, fore-arm, and leg, or a place near it, at which the greatest quantity of muscles is collected, has the bluntest sense of touch; the fore-arm is a little more sensible than the arm, the leg than the thigh, and the fore-arm is on the whole more sensible than the leg. The convex part of the joints, as the skin over the patella, olecranon, and acromion, are more sensible than that in the popliteal space, the bend of the arm, and the axilla. The internal surface of the arm, and the posterior surface of the leg, do not differ much respectively from the external nor anterior. The arm and leg are far excelled by the hand and foot, and the hand is greatly superior to the foot. In the hand, touch is much more acute on the palmar than on the dorsal surface. skin over the heads of the metacarpal bones is more sensible than that in the middle of the palm; and the sensibility gradually increases from thence towards the points of the fingers. The heel is more sensible than the middle of the sole of the foot. The dorsum of the hand and foot are surpassed by the lower ends of the fore-arm and leg. In general, the distal end of the arm and leg is more sensible than that towards the trunk, yet the skin over the deltoid muscle surpasses that towards the elbow.—Ibid.

Chance.—Dr. E. H. Gregory, in the St. Louis Medical and Surgical Journal for July 10th, 1868, declares that, under all circumstances, chancroid is a local disease. Syphilis, on the contrary, represented by chancre as its initial lesion, is, under all circumstances, a constitutional disease. Chancroid is the direct result of a specific virus which implicates only contiguous parts, and is curable by local means. On the contrary, chancre, like the vaccine sore, is the indirect result of a specific virus. From the moment of contact, the work of constitutional contamination is in progress; and as the mature vaccine pustule announces the completion of the period of incubation in the disease to which it pertains, so the perfected chancre proclaims the accomplishment of constitutional syphilis. The following characterizes the local venereal sore:—1. Chancroids appear within a few hours—at most, within a few days after infection. 2. Chancroids are more frequently multiple than single. When but one appears at the outset, others

are apt to spring up from successive inoculation. 3. Chancroids are pustules before they are ulcers. 4. Chancroids show much inflammation and furnish pus freely. 5. Chancroids are soft, no induration, edges loose. 6. Chancroids have abruptly-cut edges, through the entire thickness of skin or mucous membrane. 7. Chancroids are auto-inoculable, and rarely implicate neighbouring lymphatics; when, however, lymphatic ganglia are involved, suppuration is invariable. Three principal points bear out the assumption that the chancroids are local sores: -1. Chancroids have no period of incubation. 2. Chancroids do not involve secondarily remote parts of the body. 3. Chancroids are auto-inoculable. Now for the description of chancre: 1. The period of incubation, which lasts for two or three weeks. 2. Chancre is single; when multiple the sores are simultaneous, not consecutive. 3. Chancre is a papula before it is an ulcer. 4. Chancre is not inflamed, nor does it suppurate, but furnishes serum in small quantity. 5. Chancre is hard, indurated base, edges sloping, firmly attached to subjacent structures. 6. Chancre does not involve the entire thickness of the skin or mucous membrane; generally is not distinctly excavated. 7. Chancre is not autoinoculable, and always implicates neighbouring lymphatics, and the ganglia so involved never suppurate. The points upon which rests the assumption that chancre is constitutional are:—1. The period of incubation. 2. Remote parts of the body are involved secondarily. 3. Chancre is not auto-inoculable. 4. The fact, as shown by repeated experiments, that its destruction, a few hours after its appearance, fails to avert constitutional infection. strumous conditions of the body enlargements of the ganglia are common, and ignorance of the condition of the glands before contagion, might place the diagnosis in doubt for a time. Under ordinary circumstances, the tending of strumous glands to suppuration, and the absence of such tendency in syphilitic glands, clears up the uncertainty. Indurated lymphatic vessels and glands indicate not only the existence of syphilis, but point to the probable site of the chancre. A sore on the genitals involves the inguinal glands. A sore near the anus implicates the group of lymphatics near the anterior superior spine of the ilium; induration of the sub-maxillary glands points to the lips, mouth, and tongue; that of the axillary glands, or those about the elbow, to the hand and arm; and that of pre-auricular ganglia to the eyelid. A chancre may be overlooked, or the patient may deny having had a sore, and the characteristic indurated pleiad will satisfy one of the previous existence of a chancre. Indolence is the chief characteristic of syphilitic ganglia, yet suppuration may take place; irritating applications, violence, the conjunction of the strumous diathesis, or the co-existence of chancroid, are all circumstances which may, under exceptional circumstances, determine the result.

The Treatment of Pemphicus.—We may, if any febrile symptoms exist, prescribe the liq. ammonia acetat. and sweet spirit of nitre. To lower the pulse, no remedy is so useful as the tinct. verat. virid., introduced by Dr. E. Cutter. When the disease occurs in young persons without any well-marked febrile symptoms, and when strong and healthy, it is a good plan to commence treatment by an aperient. This is to be followed by "Dover's powder" at night. A nutritious diet of easily digested food is necessary. If

diarrheea be present, dilute nitric acid and opium are indicated, which, besides acting as an astringent, is a good tonic. After a few days, cod-liver oil and quinine may be prescribed. I have derived much benefit from the syrup of the phosphate of iron, quinia, and strychnia. According to Professor Laycock, phosphorus is an important, and probably essential, constituent of brain and nerve-tissue. "It is an equally important and essential constituent of all tissues, of at least higher organisms, whether animal or vegetable. Consequently, however beneficial the medicinal phosphor-compounds may be in certain diseases and defects of the nervous system, they will be equally useful in certain diseases and defects of the tissues in general." In many cases stimulants are necessary; and if the patient has been accustomed to either beer, porter, or spirits, they may still be allowed. Sometimes claret answers best. In the relapsing variety, arsenic is necessary,—which remedy is well known to be a pure nerve-tonic, acting on the capillary system. If a syphilitic taint be suspected, iodide of potassium should be prescribed. The local treatment I adopt is to open each bulla, and apply carron-oil, or oxide of zinc and oil, -in some cases zinc ointment, to which one or two grains of carbolic acid to the ounce has been added, answers better.—" On Neurotic Cutaneous Diseases," by H. S. Purdon, M.D.

IODIDE OF STARCH POULTICE.—We give (from Dr. Ringer's "Handbook of Therapeutics") the following formula for an iodide of starch poultice, to be applied to sloughing sores, &c.:—Take 2 ounces of starch, and mix with 6 ounces of boiling water to form a jelly; then add, before cold, half-an-ounce of tincture of iodine. The poultice is now ready for use.

REPORT ON DERMATOLOGY.

FRANCE.

Our respected friend, Dr. A. Doyon, Editor of the "Annales de Dermatologie et de Syphiligraphie," has kindly sent us the following communications:—

Lyons, Feb. 17, 1870.

I will not be at Paris until the end of May. I can send you only at that period the report upon the frequency of skin diseases during the year 1869 in that city. As for the report of Lyons, it is being drawn up at this moment, and I hope to be able to send it to you in a few days.

As to new methods of treatment, there have been none, neither external nor internal. The employment of carbolic or phrenic acid is in general use. You know that in France the Dartrous diathesis is admitted, contrary to the opinions of Hebra, and English dermatologists. In these cases recourse is had to arsenic, without, however, attributing to it all the properties and efficacy which Mr. Hunt ascribes to it. You know also that in the class of arthritic dermatosis, M. Bazin and his school recommend as particularly efficacious the employment of the alkalies. In a word no new method of treatment has been produced, and I may say as much for derma-pathology, in which nothing novel has arisen lately.

Lyons, March 19th, 1870.

I have been able to procure only this morning the report which you asked from me. I hasten to send it, begging at the same time that you will excuse the involuntary delay.

SKIN DISEASES (NON-SYPHILITIC) TREATED AT THE "ANTIQUAILE."

			AI	OULTS (MA) 1869.	LE) ATTENI	DED DURING 1868.
Eczema,	• •			190		81
Prurigo,	• •	• •	• •	41	• •	24
Psoriasis,	• •		• •	39	• •	68
Sycosis,		• •	• •	27		21
Tinea Tonsur	ans et Circ	inata,	• •	9	• •	7
Lichen,	• v		• •	13	• •	10
Ecthyma,	• •	E 0	• •	10		8
Pityriasis,	• •	• •	• •	7	• •	4
Acne,	• •	• •		7	• •	8
Herpes,	• •	• •	• •	9		4
Lupus,	• •	• •	• •	4	• • ;	0
Cancröide,	• •		• •	10		8
Cancer (melar	iosis),	• •	• •	1	• •	0
Favus,			• •	1	* * *	3
Elephantiasis	(of legs),	• •	• •	1	p 1	1
Anthrax,	• •	• •	• •	1	• •	0

All cases of scabies are treated at the extern department. In 1869, the number was 427, whilst cases of scabies complicated with or accompanied by other cutaneous affections numbered 39. In 1868, the cases included in the former class amounted to 400. The parasitic affections are treated apart. I think that this information will be sufficient, as it represents exactly the skin diseases treated in the only hospital of Lyons where they are admitted, the principal physician of which is Dr. Gailleton.

Receive, I pray you, the assurance of my sincere and devoted regards.

A. Dovon.

WE have received the following letter from Dr. Pick, Editor of Archiv für Dermatologie und Syphilis:—

" Prague, March 18th, 1870.

"Dear Sir,—I am so taken up with business, with my lectures, and with the editing of the *Archive*, that it is impossible for me at this moment to send you the desired article. Allow me, my dear Sir, to send you my best wishes for the success of the new Journal of Dermatology under your editorship, and receive my offer of a mutual exchange of our Journals.

"While I again beg that you will kindly excuse me for the present, I subscribe myself, with great esteem, yours, &c.

"F. J. PICK."

Notice to Correspondents.

SEVERAL mistakes having already occurred in the delivery of letters, &c., the Editor of this Journal begs his correspondents to direct their communications, &c., to Dr. Henry Samuel Purdon, 5, College Square East, Belfast.

JOURNAL OF CUTANEOUS MEDICINE,

AND

DISEASES OF THE SKIN.

ON MORBID PIGMENTATION OF THE SKIN.

By William Frank-Smith, M.B., Lond., F.C.S., Physician to the Sheffield General Infirmary; Late Physician to the Sheffield Public Hospital; Lecturer on Medicine and Clinical Medicine, Sheffield School of Medicine.

F the many syntheses and analyses taking place in the laboratory of the body, the formation and decomposition of the several pigments are not the least interesting. Many of these pigments are easily isolated; many of them, under the spectroscope, exhibit characteristic absorption bands; many of them are intrinsically beautiful. Including secondary products in the series, it is easy to form from them a long chromatic scale with indigo, from the urine at one extremity and hæmatocrystalline at the other.

Hæmatocrystalline is the most beautiful of these; and as a factor in the physiological problem, the most important of all these. Its highly complex formula is a type of the high tension to which, in mammalia, nature has elevated organic matter. With an atomic weight of 13280, it is yet as obedient to the laws of crystallization as carbon with an atomic weight of 12. It is the key-stone of the arch, whose two piers are the organic and the inorganic, and whose name is life.

Uromelanine, a derivative of hæmatocrystalline through urochrome—a blackish brown powder, void of form and void of colour—is as interesting to the pathologist as its congener is to the physiologist. It owes its name and quantitative analysis to Dr. Thuddicum. This observer obtained it in large quantities by the chemolysis and physiolysis of urine. He gives it the very complex formula, C36 H43 N7 O10, and has combined it in definite proportions with silver and other metals. I think there is very

little doubt that this substance is identical with the pigment of the skin in health and disease, and that, when an excess of the compound from which it is derived exists in the blood, a parallel excess of this, or rather of an intermediate substance, will occur in the urine. If this be so, it will be evident from the fact which I am about to adduce that all morbid pigmentations of the skin are to be classed in two divisions.

I.—Pigmentations due to temporary excess of uromelanoid pigment or pigment-forming substances in the blood.

II.—Pigmentations due to the abnormal attraction of the normal pigment, or pigment-forming matter to the skin.

Of this second division there are two sub-divisions.

(a.) Pigmentation, in which the pigment is attracted to limited portions of the skin.

(b.) Pigmentation, in which the pigment is distributed more or less over the whole cutaneous surface.

Of the first division I know one example only. The morbid pigmentation of the skin, which is the accompaniment and consequence of the accumulation of pigment in the spleen that occurs in some cases of malarious fever—a phenomenon described by Frerichs, in his section on the pigment liver, and before him described by Addison. A case of this kind came under my care, and suggested to me the subject of this memoir. In these cases it would appear that the blood accumulated in the spleen stagnates, probably is extravasated; it undergoes decomposition, its hæmatocrystalline being converted into a uromelanoid pigment. This pigment may, under certain conditions, be carried into the general circulation en masse, and may be deposited in the liver, brain, kidney, and skin, constituting a pigmentary embolism; or some product of the stagnated hæmatocrystalline, intermediate between it and the uromelanoid pigment, such e.g. as urochrome, may be taken up and oxidized into the final pigmentary product in any of the regions above-mentioned. Parenthetically, I may say here I should like to know whether it is on record that, in cases of melanotic cancer, pigmentation of the skin has been observed. It seems possible that these tumours might act as reservoirs of pigment, just as the spleen has been shown to act: in this case a second example might be added to the first division.

The case I have referred to is this:—On February 9th, 1867, George Bunting was admitted as an out-patient under me, at

the Sheffield Public Hospital and Dispensary, aged 34; he had served in the army of India; had suffered from liver disease. ague, and enlarged spleen; had had a gonorrhea, but no syphilis. He was under my care up to July 1st; and, during the time between these dates, exhibited a series of symptoms which I considered to be the effect of two, or perhaps three distinct migrations of pigment from the spleen through the systemic circulation, including delirium, intense cephalagia, and coma. During the first month he complained of great and increasing debility; from time to time brown oval patches, 1 in. to 2 in. in diameter, appeared on his legs. The general integument was dingy, but these maculæ were of a deep mahogany-brown, well defined and indurated. I discovered them while examining the integument for indications of Morbus Addisonii. His urine, which, for two weeks, contained albumen and a few very dark granular casts, was twice examined by me in the quantities passed during 24 hours. I was then examining specimens of urine for indigo, and submitted these to my usual process, described in the first number of Vol. I. of the Journal of Cutaneous MEDICINE. Instead of indigo I obtained, in both cases, a copious deposit of a substance, blackish-brown pulverulent amorphous, soluble in alkalies, re-precipitated by acids, which I then considered to be humic or geic acid, but which I have no doubt was uromelanine. I had previously noticed a rich mahogany-brown coloration when testing for albumen with nitric acid. This case, according to my view, may be considered as coming under the first division of morbid pigmentation.

Of the second division very many examples at once suggest themselves. And not only is the character constituting the definition common to all, but this also, that they may be all ascribed, with more or less certainty, to chronic hyperæmia of the skin. I say more or less, because, in the case of the most important of them all—Morbus Addisonii—I have no direct evidence of cutaneous hyperæmia to offer. Under sub-division (a) may be placed—

- (1.) Lentigo, or Freckles.—In some complexions, the action of the sun induces a disfiguring, punctated pigmentation. The pigment is deposited, as it were, by caprice, as in the skins of spotted animals, in isolated patches. These, perhaps, bear some relation to the distribution of the cutaneous capillaries.
 - (2.) Ephelis.—The skin of all the fair races, when exposed to

the direct rays of the sun, becomes pigmented, and here the stage of hyperæmia which precedes the pigmentation, or "tanning," is easily demonstrated.

Not the sun only, but the radiated heat from fires, induces the same change, as in the case of cooks, or of old people or sickly children, who crouch near the fire; so also with furnacemen and casters. Recently I saw a boy who worked in one of our great rolling-mills, on whose chest the fire had not only induced a deep pigmentation, but had cracked the epiderm into diamond-shaped scales, so that the skin of his chest was like that of a snake—a spurious ichthyosis.

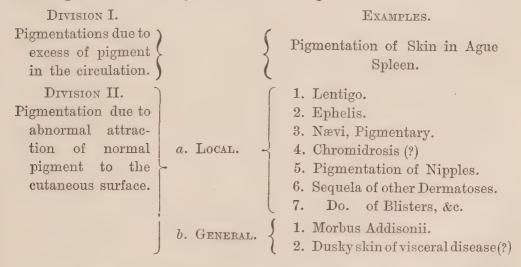
- (3.) Nævi Materni.—Nævi Pigmentaires of Hardy, often associated with an unnatural growth of hair, another indication of local hyperæmia.
- M. Hardy gives from Alibert a curious case of this kind:—
 "Alibert cite a ce sujet l'histoire d'un Italien qui seduit par le
 visage et les graces d'une jeune femme la demanda en mariage
 l'epousa et se trouva singulierement effraye en reconnaisant le
 soir de son mariage que sa nouvelle epouse presentait sons la
 presque totalite de l'envelope cutanée ordinairement recouverte
 par les vetements de large taches noires et velues qui faisaient
 resembler son corps a celui d'un chien barbet. Cette facheuse
 defformité donna lieu immediatement a une separation legale."
- (4.) Chromidrosis, a disease mentioned by Hebra, in which the sweat glands, or hair follicles, exude a dark pigment capable of being washed off. [I hesitate about including this condition in the list.]
- (5.) The pigmentation which accompanies long-continued dermatoses, associated more or less with local hyperæmia, eczema, prurigo (especially in the case of old women. Dr. Pye-Smith, of Guy's, pointed this out to me in the case of an old woman, supposed to be suffering from Morbus Addisonii), the syphilides, &c., &c. In the case of eczema, associated with retarded venous circulation, the relation between the intense pigmentation and hyperæmia is evident.
- (6.) The pigmentation of the nipples of pregnant women—here again hyperæmia.
 - (7.) The pigmentation following epispastic applications.

Under sub-division (b) may be placed—

(1.) The pigmentation of the skin so well known as the associate of cancerous disease of the abdominal viscera.

(2.) The bronze skin of Morbus Addisonii. I experience great reluctance in speculating vaguely on a disease the subject of so much solid and laborious research; but as it has already been suggested that it is induced by the influence of the diseased suprarenal capsules on the sympathetic, I venture to ask if it is not probable that this same depressing influence may induce a general relaxation of the ultimate cutaneous arteries, and so a chronic cutaneous hyperæmia, small in extent, but prolonged. In a case of undoubted Morbus Addisonii—(the patient, I fear, scenting a sectro cadaveris in the excessive solicitude of the house surgeon and myself, left before death, and disappeared, but the symptoms were unmistakable)—I examined the urine for excess of uromelanine, and failed to find it. Dr. Thuddicum examined quantitatively the urine of a similar case, and found that the uromelanine was less than in the healthy subject. It is evident, therefore, that the pigmentation of Morbus Addisonii does not depend upon excess of pigment in the blood, and that it is properly placed in my second division. Whether the pigmentation following abdominal cancer is due to a similar depression of the sympathetic is also a curious question.

The very remarkable case of melanuria, in a patient with a cancerous tumour of the leg, related by Dr. Stevenson, in the Guy's Hospital reports, may indicate that a cancer can liberate pigment, producing elements into the general circulation, in which case the dusky skin of visceral disease would find its place in Division I.; but at least I think I am justified in offering to Dermatologists the following table:—



APPENDIX.—I may state here that I am now engaged in perfecting a simple method, by which the uromelanine producing

substance in the urine may be quantitatively estimated. A given quantity of urine is diluted with an equal measure of distilled water; to this is added a definite quantity of sulphuric acid, S.P.G. 1.843. The mixture is allowed to stand for ten minutes exactly, and then added from a burette to water in a tube connected with a candle-light of constant illuminating power by a simple optical apparatus. At the moment that the light is obscured to a certain extent, indicated by the disappearance of an opaque line, the burette is examined, and the relative quantity of uromelanine read off.

CASES OF SKIN DISEASE RECENTLY OCCURRING IN THE METROPOLITAN FREE HOSPITAL OF LONDON.

By Charles R. Drysdale, M.D., M.R.C.P.L., F.R.C.S.E.

TINEA DECALVANS.—A young man, aged 22, came under the care of Dr. Charles Drysdale during the past winter, January, 1870, with commencing alopecia areata of the scalp. The history was a singular one. In the winter of 1868, the same person came as patient to Dr. Drysdale, suffering from entire and extraordinary baldness, which had come on gradually for about a year and a-half. Patient's health at that time was excellent; indeed he was one of those rare persons who had never suffered from illness as long as he could recollect. The disease of the scalp was evidently that known under the name of area, or alopecia areata; and to such an extent had the whole of the hairy scalp been denuded of its covering, that Dr. Drysdale gave him but faint hopes of regaining the hair; but, nevertheless, used blisters and stimulating lotions for the space of four months, apparently to no purpose. The patient's time was limited, and he disappeared, having gone down to Essex into the country to carry out his occupation as shopman in a haberdasher's shop. At this time it might have been almost literally said that he had not a hair on his head, for certainly it would have been easy to count the some twenty or thirty which remained. There was, in addition to these, some fine down, seen at the nape of the neck; even the eye-lashes had fallen out. On reappearing in January, 1870, the patient was quite unrecognisable.

He had a fine glossy head of blackish hair, which, however, presented, he mentioned, in one or two spots, a tendency to again fall off. Dr. Drysdale interrogated him as to the means of treatment which had so admirably succeeded in restoring his hair, and was informed that one of those unlicensed practitioners, an "old lady," had recommended the use of a mixture of rum and milk as a local inunction. Whether from the rum and milk, the change of air, or the force of time, the hair had grown again, and the disease was re-appearing. The use of the liquor epispasticus of the British Pharmacopæia, continued during two months, caused the progress of the disease to be checked, and some fresh hairs appeared again, when the patient ceased to attend.

Note.—The course of this and other similar cases has led Dr. Drysdale to say that we must not be too absolute in any bad prognosis in cases of tinea decalvans. Patient application of blisters during a year, or even more, will often be ultimately rewarded by cure of this unsightly disease in young persons, and especially in children. Three such cases were lately sent to him for inspection by Mr. Milton, whose contributions to the pathology and treatment of diseases of the skin have been so important. In all of these cases a lengthened treatment by blisters had produced a thick growth of hair, where formerly there had been nothing but wool, or perfect baldness.

With respect to the general treatment of skin diseases, Dr. Drysdale places great reliance in a strong solution of caustic potash, in many cases of obstinate eczema of the ears and lower extremities, one of caustic potash to two of water. It is a painful application, but the pain ceases on the application of wet rags to the part. A severe case of lupus of the nostrils, lately at the Metropolitan Free Hospital, was greatly benefited by the application of the stick of nitrate of silver thrust deeply into the diseased tissues, whilst the patient took arsenic internally. Dr. Drysdale holds, in common with many others, that prurigo is almost always caused by the presence of the pediculus vestimenti; and uses habitually an ointment composed of lard and stavesacre powder, which proves very effectual in most cases, especially if the patient will take care to kill all the insects he can find, and hangs up his clothes at the fire on going to bed. The application of nitrate of silver is often of service in pruritus vulvæ, and pityriasis versicolor is best cured by the topical application of the sulphurous acid of the B.P. Warts should be cut off, and the roots touched with glacial acetic acid. In syphilitic eruptions, Dr. Drysdale has renounced mercurials, and uses large doses of iodide of potassium, ten grains at least, thrice daily, both in secondary and tertiary syphilis. In infantile hereditary syphilis, one grain of the iodide in water or syrup is the best of all remedies in his experience; and he maintains that the mercurial treatment of such cases has been proved to be most unsatisfactory, both by Dr. Boeck, in his "Recherches sur la Syphilis," and by his own experience of such treatment, whether by ointments or internal medication. Syphilitic rupia, accompanied by albuminuria, occurs occasionally, and ultimately carries off the patient. A case of this kind has just occurred in the Metropolitan Free Hospital under his care. Fortunately such cases are rare.

CASE OF INFANTILE SYPHILIS IN ONE OF TWINS.

By H. E. CAUTY, SURGEON TO THE LIVERPOOL DISPENSARY FOR SKIN DISEASES.

ARGARET L. came on the 26th February, 1868, to the dispensary with a child, whose father is a shoemaker. She has had four dead-born children, and has been under treatment for secondary symptoms, though there are none at present visible. The child is one of twins, the other having no eruption or any signs of disease; they are both squalid, evidently badly nourished, and are at present ten weeks old. The child is one mass of scaly venereal eruption, the eyes and nose being especially bad. Owing to the nostrils being stopped up, it has great difficulty in taking the breast. It has been treated for some weeks at the Homeopathic Dispensary. The prognosis was very unfavourable.

There not being any part of the body as large as half-acrown in any one spot free from scales or inflammation, where the lamina had peeled off, she was directed to anoint the whole body with an ointment of 7th of ung. hydrag. fort. and ung. cetacei, and to give the child 6th of a grain of hydrag. bichlorid in 3i syrup sarzæ three times a day; also to wean it. On March 1st, the feet being better, gr. x of ung. hydrag. fort. was rubbed in every night, and glycerine applied to the flexions of

the joints. March 4th—Eruption much better, but covered with varicella. 6th—Face quite clear; vesicular eruption subsiding. April 25th—Child quite free from any visible disease, and better altogether.

July 15th—The child was brought again; the mother, being starving, has had to suckle again. She herself has now ulceration of the throat, and white deposit on fauces. The child has psorias syphilitica and sores on the vulvæ, much diarrhæa, and flatulency. They attended some few times, getting gradually better, and then disappeared.

The points of interest in this case are—firstly, the rapidity of recovery from an amazing amount of unchecked disease, and the immunity of the other twin up to the last inspection in the middle of August from the poison the child and the mother suffered from. It also appears difficult to limit to what extent the use of mercury can be carried, not only with safety, but with advantage.

ON THE ANCIENT LEPROSY, OR ELEPHANTIASIS GRÆCORUM.

By J. L. Milton, Surgeon to St. John's Hospital for Diseases of the Skin.

Forms of Leprosy.

THE light shed on leprosy by recent investigation has only served to bring out its hideous features and hopeless nature in stronger relief, and to show more clearly our utter ignorance of the causes on which this strange malady depends for its origin, and of any remedies likely to cure or even to alleviate it.

The report on leprosy issued by the College of Physicians contains a very large amount of information on the subject. In fact, taken together with the appendix and extracts, it may be said to comprise pretty nearly all that is known about the disease; and I, therefore, proceed to give as careful, though brief, digest as I possibly can of this important work, which will be a lasting memorial to the unselfishness of those gentlemen who compiled it.

And yet, I suppose, this report, bearing so many famous signatures as vouchers of its value, and issuing from the press of her Majesty's printers, is the worst written book in existence.

Irrespective of many confused expressions, it contains quite two hundred unpardonably bad errors! A singular verb is constantly made to agree with a plural nominative, and, possibly with a view to strict impartiality, a singular nominative is over and over again yoked to a verb in the plural. The verb is sometimes made to agree with the apposition of the nominative, instead of with the nominative itself, and is now and then entirely omitted from a sentence, its place being supplied by a present participle. Sometimes an incomplete sentence is made the nominative to the verb; sometimes part of a sentence is clipped off as an incumbrance. Occasionally an adjective belonging to the amputated or forgotten member of a sentence is, by an unnatural operation, made to adhere to the stump. A case is repeatedly spoken of as if it were a human being; definite articles and apostrophes are every now and then omitted without any valid reason, and the generally admitted dependence of the subjunctive mood upon certain conjunctions is entirely ignored by some of the writers, who possibly esteem it an old-fashioned prejudice.

I don't know who is responsible for such errors as goiter, sclarotic, livlihood, dysentry, effections, linament, iodide of potassa, albinoism, rancous, dependant, bleeched, asseous, calaplasms, bulla, tenably painful, a papulae, squam-os-a, flexions for flexors, had for add, cutaneous for simultaneous, "there incurability," "the Dr. Storell," "being being"; or for passing over such mistakes as classing strophulus among the pustular and vesicular affections, describing a man as the son of his father, a town as a stone-wall structure divided into six rooms, and a disease as extending outwardly from the small toes; or retaining such expressions as too much of fish, healthy offsprings, a refractory cells of wood, &c.; but I know that such faults are utterly inexcusable, and that, had they appeared in a memoir issuing from a special hospital, we should have heard plenty of vulgar abuse of them.

It seems now to be established beyond all question that leprosy is always one and the same disease, and that there are two and only forms or varieties—the tubercular, or superficial, and the anæsthetic, or deeper seated, the lepra mutilans. There may be any grade of severity of either; they may be restricted to a very small surface in one person, and in another invade the whole frame. They may exist separately, or both may assail

the same patient. In one case one set of symptoms may take precedence in point of time or severity; in another the order may be reversed; but, amidst all complications of this kind, the absolute identity of the two forms can be clearly seen. All other varieties beyond these two, even comprising the eighteen described by the intelligent native doctor of Jhallawar, spoken of in the report, are either unnecessary sub-divisions, or they are diseases which have been confounded with true leprosy, such as alphos and lepra nigricans, syphilis, to which indeed it bears at times a very strong resemblance, struma, boucnemia, Aleppo boil, eczema, and impetigo, one or more of which may be confounded with it. It is not an offspring or degeneration of yaws, syphilis, or struma, though possibly in some cases the symptoms of leprosy are aggravated by the presence of one of these diseases. The tubercular form of leprosy seems the most common, except in East India, where the anæsthetic variety is thought to be more prevalent, but the relative proportion of the two diseases is differently given by different persons, one gentleman computing the number of anæsthetic cases at onefourth of the whole, while another merely states that the tubercular variety is the more common.

Dr. Carter, who is an authority, speaks in the report* very briefly of a disease called white leprosy, which he says is probably a variety of the leuke of the Greeks. I presume, therefore, that it is distinct from true leprosy, as well as from lepra vulgaris or alphos. Possibly the "scaly brightness" of the skin spoken of in some of the answers may refer to one of these two affections; which it is, I am unable to determine. Dr. Bell says† that the white leprosy strongly resembles (not that it is identical with) lepra vulgaris. It is much like the affection described under the name of vitiligo, and yet bears a strong resemblance to lepra. It is known as "barras," and, as described by Mr. Bose, appears to be identical with the berat lebena, but this gentleman says that the sensibility is not affected in pure cases of either this or of the dusky lepra (berat cecha). Both these affections, I may remark, may co-exist with either form of leprosy. The general opinion is that the centre of the patch at any rate loses its sensibility in the berat cecha, and that all the patch becomes insensible in the other form. which is a variety of leuke.

Nature of Leprosy.

As to whether leprosy is hereditary or not, we find every shade of opinion; some writers maintain that it is decidedly so. Dr. Day, who seems to have taken great pains with his cases, says (in the report), that in twenty-seven cases out of forty-six. there was no evidence of hereditary transmission; Dr. Porteous found none in twenty-nine cases out of thirty-one; another writer sets down the per-centage of hereditary cases at only fourteen; the answer from Loodiana is, that, out of nineteen cases, not one appeared to be hereditary; and Furrudpoor is represented by a third form of conclusion, the numbers being pretty evenly balanced. If, however, the question be made to depend on the number of votes, it must be decided in favour of the view that leprosy is hereditary, an opinion to which the majority will ever incline when the point can be raised at all. It ever has been, and probably ever will be thus. Owing to our defective powers of observation and reasoning, conclusions rather flow from opinions than from a strictly logical examination and connecting together of facts. With the very same facts before their eyes different men will form different opinions. In the present case, as in many others, had the number of answers been multiplied ten or a hundred-fold, the proportion of the believers in contagion or heredity to that of the disbelievers would have remained unaffected. It is the result of some great unknown law which regulates the distribution into groups of different forms of physical construction. If we were to take a thousand, or a hundred thousand men, we should find a certain relative proportion in each who held particular opinions on all matters—religion, policy, art, taste, and so-on—just as surely as we should find a certain number prone to eczema, gout, consumption, or any other disease.

Leprosy is probably hereditary, in so far, that a leprous child is sometimes born of parents similarly affected, and that one or other of these parents is again descended from a leper. Such evidence there undoubtedly is and in the nature of things ever must be, and such proofs will always be triumphantly adduced, irrespective of any amount of negative evidence. The facts which establish a theory or which strike the imagination are always at hand; those which would make shipwreck of it are apt, with all possible good faith on the part of the reasoner, to

lie unnoticed. But so it is in everything; a fortune made by a bold stroke fascinates the imagination in a way which few can resist: the thousand victims of unfortunate speculation sink unheeded. There were votive tablets enough hung up at Athens in honour of Poseidon by those who had escaped shipwreck, but there was not one to tell of the numbers that had perished.

There is a certain amount of evidence that leprosy is contagious. The number of those who believe in its contagious nature is however certainly small compared to those who deny The report states* that out of sixty-six answers only nine speak of it as contagious, while forty-five represent it as noncontagious and twelve are silent on the subject. Yet the arguments of the contagionists have wrought conviction among some observers here. They consider it proved, that, though people may with impunity live in the same house with a leper, vet that the discharge from the sores has in some cases conveyed the disease. In other cases, leprosy appears to have resulted from connection†; and Dr. Pollard, who looks upon leprosy as contagious in every stage and form, mentions the case of a family who permitted their children to play with a leprous negro boy, in consequence of which they one and all became infected, and the majority of them fell victims to their fatal indiscretion (!) a rather strong statement and certainly conflicting with all other testimony. Were leprosy so direly contagious as this it would be easy to accumulate irrefragable proofs, whereas the evidence proving it to be so is really very doubtful, while it is as certain as anything can be that people remain for years exposed to contagion in every form without being affected.

Leprosy is stated to be on the increase in the Windward Islands, the "out-islands" of the Bahamas, Guiana, Jamaica, Demerara, Mitylene, Ceylon, Singapore, Penang, Molucca, Mauritius and the Bombay Presidency; to be decreasing in Sweden, Iceland, Italy, Trinidad—(some writers, however, think it is stationary here)—Smyrna and the Bombay Presidency; and stationary in Norway, New Brunswick, Barbadoes, Tobago, Scio and the Madras Presidency.

The fading away of this strange malady out of our land, and indeed out of great part of Central and Western Europe, is one of the most mysterious things in the history of medicine. A mortal hopeless sickness, which made the face like that of a satyr, and led men to think the blood must be as sluggish and full of corruption as some lethal muddy ditch, which invaded all parts of the frame, and so transformed its victims, that men recoiled in horror from them, and gave them of like maniacs to the filth, chains, and horrors of leper houses, or drove them away like wild beasts to dwell in tombs or caverns, or to lie in gateways or by the roadside; the scourge of the most powerful and civilized nations, which on one side projected its lurid and fearful shadow from Syria to the Atlantic and North Sea, and on the other stretched louring over Asia to the banks of the Ganges and Indus; which raged with equal fury among the sandy plains of Asia Minor or Egypt,—amid the smiling fertility of Sicily and on the desolate coasts of Iceland, has over a considerable part of our continent collapsed like the geni when wiled by the fisherman to re-enter the casket, and has become a wonder and a show in the lands where once kings and statesmen legislated for its myriads of victims. Now and then a fellowcountryman who has contracted leprosy abroad comes back to die of it at home, or a colonist sends his child attacked by it to see what English skill can do in the way of relief; occasionally a person who has never been out of England may be seen suffering under either variety, but to a very limited extent and almost purely local. The anæsthetic form has been met with in this state in several instances and even the mutilating variety is not unknown. A case was brought forward lately which seemed to be undoubted lepra mutilans occurring in a person who had always resided in England, and in the third volume of the Journal of Cutaneous Medicine I reported three cases seen in Germany by Dr. Steudner of Halle. And this is all we now see of leprosy in a land where there were once so many leper houses!

Causes of Leprosy.

It is not of much importance to speculate on the reasons why it has ceased to scourge Europe. Still the accumulation of facts and suggestions as to the paths by which investigation might be pursued are always legitimate objects. Possibly, then, climate may have had something to do with this great fact; changes in the electricity, habits and food, may also have had their share of influence. That climate has altered very materially over a great part of Western Europe, owing to the draining of great bogs and small lakes, felling of forests, and the upheaval of land,

there can be little doubt; all over England the rainfall is decreasing, most likely owing to the great diminution of evaporating surface. For quite a century the winters here have been getting colder* and the summers hotter. A hundred years ago, men chronicled a heat of 78° or 80° in the shade as something wonderful; a little more than two years since, a temperature of 94°, 96°, and even 102° in the shade was registered. Prior to the beginning of this century, a fall below zero was almost unknown. Within the last ten years, the thermometer sank in one winter to six, in another to ten degrees under zero. Meanwhile the country gets drier and drier. Droughts, which a quarter of a century ago only occurred very rarely, are now rather the rule than the exception. During the past spring, the rainfall was more than three hundred tons per acre less than the average. Streams and rivers are diminishing in width and depth; and unless artificial irrigation be resorted to, England bids fair to become almost a desert to what it was. Now, if my information be correct, it is essentially within the time that these changes have been so marked that leprosy in its worst form has ceased to be indigenous in this country. My friend Dr. Cattell assures me, that, in his youth, patients afflicted with this disease used to come to Willoughby Spa, on the borders of Northamptonshire and Warwickshire, to drink the saline and purgative waters of that place. The state of the magnetism too, and electricity in England, has in all probability undergone a considerable change within the time I speak oft. Clothing has altered; our ancestors wrapped up far more warmly than we do, either because they took less exercise, or to counteract the moisture in the air, as is now done in Ireland, where they wear woollen when we wear cotton. Possibly both causes may have had a certain amount of influence. Our forefathers, too, eat much less fresh meat than we do, butcher's meat being less easily procured during winter. The introduction of spirituous drinks may have had something to do with the matter. According to Mr. Tovey, the Jews of Morocco are thought to preserve themselves from elephantiasis by the use of brandy distilled from raisins, pears, figs, and dates.

The testimony of the report is however not calculated to lead

^{*} The Stream of Life on our Globe. P. 577.

[†] The Stream of Life on our Globe. P. 399.

[‡] SATURDAY REVIEW, Aug. 27, 1864.

us to place much reliance upon most of these causes. For instance, diet is constantly spoken of by some writers as a factor but the evidence is conflicting in the extreme. One gentleman thinks that salt-fish, pork, and bad oil promote the development of leprosy. Yet pork is not likely to be a cause of the disease among the Jews and Belemmnas, who both abhor it,* and are vet subject to the disease. Oil was scarcely likely to have been a cause of its frequency in Scotland and England. Again, the Chinese in Victoria who suffer from leprosy live principally on beef, mutton, and rice. The Chinese prisoners in this colony were at one time allowed for diet maize bread, fish, meat, potatoes, sugar, and salt; but the disease increased so rapidly under this kind of feeding that it was thought better to put them on short commons, under the influence of which, it is said, the progress of the malady came to a halt. The Somalee tribes, among whom leprosy is very prevalent, never eat fish under any circumstances; and the inhabitants of Furrudpoor, who eat more fish than their neighbours, are not more subject to the complaint. The disease is rare in Burmah compared with the western coast of India, yet fish forms as large an item of diet in the one place as in the other. Again, the exclusive use of meat for diet is looked upon as an aggravating cause at Nevis;† while Dr. Steventon, of Moulserrat, says that the leprous patients of that district confine themselves entirely to a vegetable diet, and Dr. Gardiner tells us; that leprosy occurs at St. Lucia though the diet of the people is mostly vegetable. Finally the evidence respecting the influence of bad grain, unripe fruits, bad cooking, and the use of spirituous liquors in bringing on leprosy is not one whit more convincing.

The authors of the report seem clearly of opinion that the disuse of salted meat and unsound food, the change from the filthy habits, and scarcity of fresh vegetables which prevailed to within quite a recent period in England, have contributed to the arrest and decline of leprosy. In addition to these causes, the wearing of linen next the skin and the giving up of fish diet at Lent are mentioned. But it is very questionable if any one of these causes can be considered as valid. Unsound food is only too much used among the poor. Our police reports tell us

^{*} Edinburgh Medical Journal, July, 1864.

[†] Report. P. 18. ‡ Report. Pp. 22 and 26. § P. lxxiv.

constantly of seizures of tons of meat and fish in a state not fit for human beings to touch. To the disgrace of our age, vast numbers of poor toiling creatures live on diet little better than garbage, while gluttonous, idle servants are permitted to consume two or three pounds of meat daily. I am afraid, too, that linen is not generally worn next the skin by the working classes at any rate, or by our seafaring population. I also suspect that till quite recently our sailors used to eat, throughout a great part of their lives, quite as much salt meat as ever did their forefathers in the days of the Henries and Edwards. Many of the stricter Catholics too in this country still eat fish all through Lent, yet leprosy does not prevail among them. In short, I cannot see the validity of any of the causes adduced, and am rather puzzled to make out what can be the use of bringing forward such evidence, unless it be with the view of warning others against treading the same path, and being refuted in their turn.

Want of cleanliness is frequently brought forward in the report as a cause of leprosy, but this argument too is untenable. It might be justly urged against such a view that dirt reigns as supreme in some of the districts which leprosy has quitted as in those it is invading, and that it would be difficult to find people filthier than some of the very lowest classes of London, Edinburgh, or Paris. Again, leprosy is said to be much more common in the South of India than in the North, though the natives of the latter are far less cleanly than the Southern Indians. Lastly, as a proof how opposed the views of different observers are on such subjects, it may be mentioned that one writer thinks that weakening the system by means of hot baths aids in developing the complaint.

In some of the answers the unwholesome state of the hovels in which the lepers live is adduced as a cause. They are described as ill-ventilated, wretched, dirty, and confined-illsupplied with air and light. But if such causes had much influence, leprosy would never have died out in Great Britain. However bad the dwellings of the coloured races may be, a parallel to the worst of them might be found in the purlieus of St. Giles's and Bethnal Green, Rosemary Lane, or Lant Street. Besides, there is evidence enough in the report itself* that the disease attacks plenty of people living in clean, comfortable,

^{*} Pp. 30 and 35.

airy houses, most of whom never entered a hovel in their lives. In some few places the well-to-do and the poorer classes suffer equally. Mr. Shaw reports having seen leprosy in Europeans who could command every luxury, and Dr. Nicholson, Dr. Carrington, and Dr. Young give similar testimony. Of course, the great majority of victims to this, as to almost every other disease, are seen in the poor, miserable, vicious, and degraded, but, alas (!) it is because they form, and with few exceptions ever have formed, the mass of the community.

And when we come to the question of climate we get no nearer the goal. When leprosy settles in a district its baneful influence spreads over every part—town and country, mountain and valley, sea coast and green field alike feel the weight of the horrible scourge, and it might almost be compared to the great bat lizard (pterodactylus), which, being able to fly, swim or travel on the land, could always overtake its prey. Thus the dwellers by the seas and rivers, and in marshy districts or illdrained alluvial soils, think themselves singled out by Heaven when they see leprosy in their midst. Yet it is found in the dry sterile plains of the North of Persia, while it is believed by the Consul to be unknown in the dampest regions of the same kingdom. It is found among the Hottentots, the mountaineers of Lebanon, and the inhabitants of some of the elevated parts of Hindostan. It occurs frequently at Conjaveram, a town standing about forty miles inland in a flat, dry, and sandy soil. It is very prevalent at Banda, where the climate is extremely hot and dry. Spain is more infected with leprosy than most European countries, and in Portugal "the chief seat of the disease, within recent times, has been the hilly district of Lofoes." And if it be more frequent in the vicinity of rivers, deltas, &c., it is to be remembered that such spots are often more densely peopled than hilly regions and sterile plains.

Age at which Leprosy appears.

The general opinion seems to be that leprosy is rare in early life. Some of the answers in the report represent it as almost unknown before the tenth year; others explain this by stating that such patients are kept in seclusion, the disease having really been seen in children in arms, and even at the time of birth. Several instances have been recorded of its appearing at the fourth, fifth, and seventh years of life, but there is no

resisting the evidence that it rarely occurs before puberty, from which time forth it may break out at any age, and it has been known to begin as late as the forty-fifth year of life.

Greater Prevalence of Leprosy among Males.

It is certainly more prevalent among males than among females, and though the same explanation has been given of its greater rarity among women as in the case of children—viz., that they are kept in greater seclusion—it will not apply in many cases, and is overthrown by stronger opposing evidence in others. The opinion, however, that it will attack some races more than others, even where both are living in the same place, is better supported, and there seems every reason to believe that Europeans are less subject to its malignant power than the natives and Jews. In Africa the Hottentots are said to be more liable to it than the negroes, and the negroes than the whites. In Mauritius it is stated to be more frequent among the Asiatic and African than in the European or Caucasian races. In Egypt leprosy is chiefly found among the Jews, and is very rare among the Arabs, whereas in Damascus it is not known to have occurred among the Jews or negroes, being confined to the poorer classes of the mountain peasantry.

Pathology.

Of the pathology of the disease there is not much to say. Mr. Macnamara, in five post mortem examinations, could not, either with the naked eye or the microscope, detect any lesion of the nerves, brain, or spinal cord; but Dr. Carter, though he observed no uniform morbid appearances in the brain or spinal marrow, found the nerves very frequently diseased, enlargement and diminished opacity at certain selected spots being the chief phenomena. Dr. Fiddes has seen the larger nerves of the arm increased to the size of the little finger, and in cases of spontaneous cure of leprosy, has noticed that this symptom disappears and that the sensibility is restored. Daneilsson and Boeck say that this change is owing to infiltration of the cellular tissue of the sheaths surrounding the nerves and of the nervous fibrillæ with a viscous glutinous fluid, similar to that which is deposited in the skin. Dr. Scheida noticed that the blood was deficient in red corpuscules, and one gentleman represents all the tissues as attacked, but principally those which make up the venous system. "In one case," he says, "where death resulted from pneumonia, the crural, femoral, and iliac veins exhibited knobby appearances, and on being opened the deposit of a caseous substance resembling tubercular matter." Destruction of the bones is generally effected by interstitial absorption, but may take place through carics or necrosis.

Prognosis.

The prognosis is unfavourable in the highest degree. There are, however, many cases of cure recorded, some spontaneous, others seemingly due to a happy selection of remedies. Frequently too, the disease having reached a certain stage, especially in the mutilating form, remains stationary for a long period, but these are exceptions, and in a vast majority of cases the rule is that the disease proceeds more or less regularly and swiftly to to a fatal end, the patient often sinking under some slight attack of another malady, such as bronchitis or dysentery. Persons, however, suffering from leprosy may live many years, and even attain an advanced age. Dr. Hyorth saw* a leper between seventy and eighty years old, whose general health was not much affected.

Treatment.

Mercury is generally denounced as injurious in this complaint. Arsenic seems, in a few rare instances, to have done good service. Dr. Bowerbank saw one case in which it seemed to keep the disease in check. One answer speaks of decided benefit having ensued in every case where the patient was long enough under the influence of arsenic given internally, and of sulphur baths and frictions to the parts which had lost their sensibility. One writer at Bhutteawa recommends as useful, preparations of arsenic and iodide of potassium with infusion of hemidismus indicus in ounce doses three times a day, or chaulmoogra pills with chaulmoogra or bipchee ointment for external applications. The answers, in the report, from Salonica make mention of two cases, in which recovery is said to have taken place under the influence of iodide of potassium, accompanied by cauterization of the ulcers; they were both in the first stage. Two cases are recorded in which a perfect cure ensued under the

use of arsenic, iodine, and iodide of potassium. One gentleman speaks of a case where a cure was effected in six weeks with nitro-muriatic acid, sulphur ointment, sulphur vapour baths, and generous diet. Another tells us of the benefit derived from the administration of dilute nitric acid and chiretta, slightly stimulating applications to the skin, daily bathing and attention generally to the health. Daily ablution with cold water is said to have been of use in the treatment of the Chinese leprous prisoners in Victoria. The tepid bath twice daily and inunction with olive-oil, thoroughly rubbed into the skin each time after the patient comes out of the bath, are said to be very serviceable.* One gentleman, writing from Monghyr, reports having seen considerable relief in many cases from hygienic measures, well-regulated diet, and the use of arsenic, asclepias gigantea and the chaulmoogra. Indeed, there is a good deal of valuable evidence as to the control which the chaulmoojin or chaulmoogra exercises over leprosy. It is given in the form of pills, five grains each; poultices are also made from it. The Lawson inermis, employed in the form of poultices, is also said to have proved useful. Counter-irritation of the spine too is stated to have acted beneficially.

Dr. Beauporthuy's treatment has been a good deal spoken of, and I, therefore, give an analysis of it, taken from the Medical Times.† It consists in ordering good diet and fresh dry air, rather difficult things to get at in some cases I should think. Salt meat, salt fish, and pork are prohibited. Bichloride of mercury, in doses of one-fifteenth of a grain, and quinine are given, the latter only when considered necessary. Frictions with cashea-nut oil are also employed, and a strong solution of nitrate of silver and copper is painted over the tubercles. The patient is also rubbed all over with cocoa-nut oil, a bath of soap and water being employed each day previous to the friction. When the feet are much affected, baths of hot cocoa-nut oil are used.

What the real success of this treatment may be I am unable to say, as the author does not give us any positive information. Quinine in my hands proved injurious, all the symptoms relapsing under its influence. Bichloride of mercury, in any doses whatever, was useless or injurious, as was iodide of

^{*} Edinburgh Medical Journal, July, 1864.

[†] MEDICAL TIMES AND GAZETTE, 1870, Vol. I., p. 550.

potassium. I could never heal a single ulcer or remove a single papule with nitrate of silver, either solid or in solution, though I tried it frequently and long enough. The frictions with oil have also, I believe, been tried before, and I believe also on every occasion with moderate success if any, acting at the most as a palliative.

Mr. Erasmus Wilson prescribed in one case nitro-muriatic acid and gentian, and then a course of decoction of the woods with Donovan's solution, returing afterwards to the use of the acid, this time with the addition of iron. The patient had gone through courses of mercury, arsenic, and iodide of potassium, with the effect, as he thought, of making him decidedly worse, and Mr. Wilson says—"The history of the patient, while under my care, was a progressive advance of the disease;" but later on, the patient's nephew, himself a physician, reported a change for the better; by using the warm salt-water bath and residing some months on the coast, the patient had so far regained his strength that he could walk a mile alone, and except on the abdomen there were no spots to be seen. M. Baumés reports a case successfully treated, the principal remedies being three hundred baths in one year, diluent and sudorific drinks and a nutritious unstimulating diet. Drs. Danielssen and Boeck say they have found the iodide of potassium, in small doses, produce some diminution of the tumours in the tubercular form, but the improvement did not last; in the anæsthetic form this salt relieved the pain in the bones, as did the chloride of potassium. Taken all in all, these remedies were of service in some cases in the practice of these celebrated observers; one patient suffering under both the anæsthetic and tubercular forms recovering so completely that in four months he was at work again, and another being freed from the tubercles by the same means, powerfully seconded by blistering and counter-irritation. Turkish bath seemed also to be very useful in some instances.

(To be continued.)

NOTES ON EPHIDROSIS.

By Henry Samuel Purdon, M.D., L.R.C.P., Physician Belfast General Hospital, and to the Hospital for Diseases of the Skin.

HE following "rough notes" on Ephidrosis involve, by way of preface, one or two brief remarks on the sudoriparous glands, organic structures, which by the way are only secondarily affected. Dr. Willis* has recently published some very interesting observations on the "Functions of the Sudoriparous System," and from which is extracted much of the information contained in the following paragraph. The perspiration is known to consist of from 96 to 99½ per cent. of pure water, and only from onehalf to four per cent. of solids; to eliminate part, or even all of this watery fluid, is the proper office of the sudoriparous glands; the saline and organic ingredients contained in the perspiration are however entirely adventitious. Dr. Willis holds the conviction that the vital action of the skin has little or nothing to do with the maintenance of the standard temperature of the animal body—the real factors of which process are the digestive and respiratory systems; consequently we may believe it to be an established physiological fact that the office of the sweat glands is merely to abstract water from the peripheral circulation, and by this means secure the conditions necessary to the return into the venous circulation of the fluids that have been shed from the arteries for the purposes of nutrition and vital endowment. That this is the case is partly proved by Simon, of Berlin, who discovered that the arterial or out-going current was constantly found to contain a larger quantity of water, i.e., to be of less density than the venous or returning current—the difference being greatest in reference to the blood of those organs where there was the most abundant separation of watery fluid. In repeating these experiments upon the blood of sheep, it was found that the serum of the venous blood was of greater density than that of the arterial, and on putting quantities of the two kinds of serum into an apparatus for endosmosis, there was observed a current of considerable power established from the arterial to the venous side. This process carried on between the arteries and veins of a living creature is, according

^{*} The Special Function of the Sudoriparous and Lymphatic Systems.

to Dr. Willis, venous absorption, the conditions necessary to which—viz., the higher density of the blood in the veins, or or returning vessels, than in the arteries or efferrent vessels in all the peripheral parts of the body, being mainly due to the action of the sudoriparous glands. Now in Ephidrosis we have an excessive discharge of the watery secretion of this system, due to extra work being performed by the sweat glands.

Upon what does this depend? I believe in a great measure upon vaso-motor nerve paresis. We are all familiar with the fact that in hot weather perspiration is very freely produced, owing to increased muscular action, by which nerve force is exhausted, whilst in a cold bracing air we can undergo double the amount of fatigue, and that with extra clothing. Dr. Handfield Jones* observes that "the increased secretion from the cutaneous surface may be reasonably supposed in a state of health to be the result of an increased supply of blood to the perspiratory glands, and we have seen that such has actually been found to result from the hyperæmia induced by dividing the vaso-motor nerves." The same author has stated that the influence of vaso-motor paresis in promoting perspiration is shown by several facts—as the occurrence of profuse sweating during sleep in consumptive patients and others; also, that when the sympathetic nerve is divided on one side of a horse's neck. that side of the face and neck appear bathed in sweat. In ague the sweating is probably due to malarious poisoning of the nervous centres, and consequently, when palsy of the vasomotor nerves ensues, the cerebro-spinal dilate the capillaries to an abnormal extent, allowing an increased amount of blood to enter the vessels, and thus congestion occurs. The sweat glands endeavour to relieve this condition by extra work, and more watery fluid is secreted in the form of perspiration, accompanied by a diminished quantity of urine. If this theory be true, it accounts. likewise for the occasional occurrence of bloody or red-coloured perspiration, which, in the instances recorded, is usually combined with depression of the nervous system—nervous debility in fact, due to mental prostration it may be, or from over bodily fatigue. To digress for a moment: look at cholera—the cold, clammy sweat, copious watery stools, thick black blood, and collapse; but to return—In Ephidrosis cruenta there may be first ordinary excessive sweating—at least, such is the opinion

^{*} Functional Nervous Disorders.

left on my mind by the perusal of published cases. Sooner or later, however, the secretion becomes tinged.

Dr. Handfield Jones* mentions the following interesting case:-"M. Parrot relates the case of a female, a hysteroepileptic, in whom bloody sweating occurred during many years on the knees, thighs, chest, lower eyelids, hands, and face. The tears were once also tinged with blood, and frequently some hæmatemesis. On one occasion, together with the hæmatemesis, there was severe gastric pain, and the skin of this part was covered with bloody dew. These hæmorrhages were never an isolated phenomenon; they always succeeded to a mental emotion, and complicated a nervous attack, attended with absolute loss of motor and sensory power. At one time neuralgic paroxysms were attended with sanguineous exudation at the painful parts. There was no deception: Parrot himself witnessed the phenomenon. There was never any reddening of the skin in the parts where the hæmorrhage occurred. The catamenia seem to have been pretty regular, and their appearance always relieved the cutaneous hæmorrhage. Parrot cites various other recorded cases of a similar character, and observes, in conclusion, that this cutaneous hæmorrhage may co-exist with others of a similar character in persons of a delicate, irritable constitution, especially in females; that all these hæmorrhages not only are associated with general nervous perturbation, but are further frequently connected with localised phenomena of pain and spasm, that they closely resemble these phenomena with regard to their efficient causes—the parts which they affect, the suddenness of their invasion and cessation, and their harmlessness. These hæmorrhages, which he terms neuropathic, proceed, he believes, from the glands of the external and internal integument. They consist of TRUE BLOOD, and not merely of redstained serum." (The Italics are my own.)

That excessive grief and anxiety can affect the sympathetic system, producing various changes, is evident from many examples, as sudden blanching of the hair, of which I have met with one case, and that upon minute investigation was found to be truthful. Again, in Nostalgia, where there is an ungratified desire to return home, symptoms of melancholia are generally exhibited. But without enumerating all the phases of this interesting disease I may state that profuse sweating is a pro-

^{*} Functional Nervous Disorders. P. 471.

minent one. We have another example occurring in the person of a "Man of sorrows," who, in His agony in the garden of Gethsemane, sweated "as it were great drops of blood."

Hebra mentions the case of a young man who was attacked repeatedly by hæmorrhage from the surface of the limbs, which usually occurred at night, at this time we know the nervous system is most relaxed. Once he saw a jet of blood, corresponding in size to the duct of a sweat gland, shoot out of the hand and rise above the level of the skin. Wilson in his work records several cases of ephidrosis cruenta, in one of which the blood came like sweat from the hinder part of the head. The patient was a child aged three months. Usually, however, these cases of cutaneous hæmorrhage are due to derangement or suppression of the catamenia. That the disease under notice is not always connected with vicarious menstruation is well-known. A case occurred a few years ago in a little girl, an inmate of an orphan home, aged eight years, who, after mental excitement, exhibited a "bloody-looking discharge" from a patch of skin on her ancle, the part affected eventually regaining its natural appearance.

To quote from Dr. H. Jones again: -- "Patients suffering from paralytic disorders often complain that the least exertion causes them to break out into perspiration; while they improve, this tendency diminishes. Here, again, we see a positive relation between nerve-power and vascular dilation. The increased secretion from the cutaneous surface may be reasonably supposed in a state of health to be the result of an increased supply of blood to the perspiratory glands, and we have already seen that such has actually been found to result from hyperæmia, induced by dividing the vaso-motor nerves. Some hold the opinion that the sudorial eruption, as Trousseau calls it, is produced by the irritation which the sweat causes; I am convinced by repeated observation that this is specially prone to occur when the nerve-power is low, and I believe it is mainly dependent upon vaso-motor nerve paresis. The vaso-motor nerves exercise a great control over the blood flow and the vital actions in parts. Their influence over the smaller arteries—the regulators and disposers of the blood-stream—is notorious, but I believe that which they exert on the condition of the capillaries is scarcely less considerable."

Excessive sweating may be either partial or localised to a

small area of the skin. We are all familiar with excessive sweating of the hands and feet so distressing to the patient. In consumption, as before mentioned, perspiration although usually present in an advanced stage, may however commence from the first—due, no doubt, to debility. Now as there can be no practice without theory, I shall conclude this brief and rather unconnected paper by a few words on the subject of therapeutics: and first on the list stands arsenic, which remedy as a nerve-tonic is I believe unequalled. For instance, Dr. Jones* states that a dose of arsenic taken before a Turkish bath has prevented perspiration being induced. In excessive sweating due to vaso-motor nerve paresis, pemphigus, &c., it is a most valuable remedy. Belladonna is a very useful drug in profuse perspiration. Dr. Sidney Ringert recommends the linament to be applied in cases of excessive sweating of the hands, but it is right to mention that when belladonna is administered it frequently produces perspiration. Aconite has also been prescribed. Quinine tones the vaso-motor nerves. Dr. Bartholowt has recently investigated the physiological action of this medicine, which, when given in a full dose, cuts off the supply of blood to an inflamed part. It is also a useful remedy when combined with dilute sulphuric acid in sweating. Such are the principal medicines administered in the disease under notice—an affection as yet only imperfectly understood. The remarks contained in this paper claim nothing on the score of originality, but are merely recorded as suggestions for future research.

SOME OBSERVATIONS ON THE RECENT EPIDEMIC OF SCARLATINA IN BELFAST.

By Brice Smyth, M.B., T.C.D., Surgeon, Belfast General Dispensary.

POR the last six months Belfast has been the seat of a widespread epidemic of scarlet fever, and although the deathrate has not been so high as might have been expected from a disease of such a malignant character, yet I found that it showed a greater tendency to spread by contagion than I have

^{*} Fundamental Nervous Disorders.

[†] Handbook of Therapeutics.

[‡] Half-yearly Compendium

seen in former epidemics. The disease first made its appearance about the end of September, and continued steadily to rise through November and December; it remained nearly stationary during January and February. In March and April there was a slight increase, and since then it has dwindled down considerably, although May and June produced a few The epidemic may now be said to have ceased, as only an occasional case has occurred since then. It is I think an undisputed and curious fact, that when a febrile epidemic is raging, we seldom meet with other febrile complaints, and if they do occur, they are generally of a milder character. In the recent epidemic that has passed over this town I have been struck with this fact. Occasionally I did meet with a few cases of typhus and typhoid fever, but these were very few, and unattended by any prominent symptoms of a malignant nature, compared with what I have seen in former years amongst the poor of this thickly-populated town.

It has been attempted to prove from meteorological observations that there is an intimate connection between the prevalence of epidemic and sporadic disease and the absence of atmospheric ozone, but the facts adduced to prove this theory have not been based on absolute data. The Rev. Samuel Haughton, M.D., F.R.S., Fellow of Trinity College, Dublin, writing in the Medical Times and Gazette of March 7th, 1867, on some of the causes alleged to produce Asiatic cholera, observes:-I shall now inquire into the ozone theory of cholera, which was urged with much earnestness in 1854 by French and Belgian theorists as a solution of the unknown atmospherical conditions that favour the spread of cholera. It was asserted, and with some show of facts in favour of the assertion, that during the prevalence of the epidemic in several towns, its increase and diminution was inversely proportionate to the quantity of oxone present in the atmosphere. From observations made in 1854 and subsequently, it was confidently affirmed by several meteorologists that the long-sought pestilential constitution of the air, imagined by Galen, has been traced out, and its exact causes discovered. The increase of ozone in the air brought health, and its diminution implied the spread of disease, and the existence of the dreaded pestilential constitution.

It was noted, however, by several intelligent observers, that ozone seemed to increase with the force of the wind, and to

diminish as the air became calm; and it had been previously well ascertained that nothing tended to diminish a prevailing pestilence so effectually as the occurrence of a strong gale of wind—a phenomenon readily explained on the contact theory of pestilence by its tendency to dilute the poison, and to prevent its spread from one sufferer to another.

It was reserved, for Mr. John Smyth, of Banbridge, to demonstrate the important fact that the quantity of ozone, like that of carbonic acid or oxygen, in the air, is almost absolutely constant; and that the indications of the ozone paper are, in a scientific point of view, to be regarded simply as the records of a very sensitive anemometer, that registers the number of particles of air that have come in contact with it during a given time, or, in other words, that records the velocity of the wind. In a paper taken from the proceedings of the Meteorological Society for June 16, 1869, my brother states further—after a long study of the subject and the result of many careful experiments—his opinion, that under normal atmospheric condition the amount of ozone in the air is absolutely constant; as will appear from the following meteorological table with which he has kindly furnished me for the ten months during which the scarlatina epidemic was raging in Belfast. This table will go far to prove this important fact, and will lead to the practical deduction that we must find out some other cause for epidemic disease:-

Extract from the Register of Daily Meteorogical Observations, taken at Banbridge, Ireland, Lat. 54 deg. 23 min. N., Long. 6 deg. 18 min., 200 feet above sea level, by John Smyth, jun., A.M., F.M.S., M.I.C.E.I.

1	Mean Reading of Barometer.		Mean Tempera- ture.		Mean Degree of Hu- midity.		Mean amount of Ozone.		Mean Force of Wind.		Rainfall.				
											Inches Collected.		No. of Days Rain fell.		
	1869 and 1870.	1868 and 1869.	and	1868 and 1869.	and	and	and	and	and	1868 and 1869.	1869 and 1870.	1868 and 1869.	1869 and 1870		
Sept Oct	29.515 29.630 29.597 29.850 29.864	29.075 29.550 29.542 29.690 29.709 29.641	49·3 42·0 36·1 38·2 37·0 41·0 48·6 51·5	45.7 40.2 43.2 42.5 44.5 39.1 47.5 46.0	82 87 92 92 89 86 71 78	79 81 90 89 90 91 86 76 75	4·7 3·7 5·8 4·7 5·7 7·8 5·4 5·4 2·8	4·6 4·5 3·7 6·5 5·4 6·6 5·7 5·6 5·1 3·0	3·8 2·7 3·0 2·7 2·3 4·0 3·5 4·1 4·1 3·1	4·0 3·1 2·5 4·1 3·8 4·0 2·8 3·1 3·8 2·8	3.942 1.534 3.116 3.136 3.007 2.415 1.070 1.111 1.627 974	1·548 1·82! 2·516 4·513 3·437 4·051 1·861 2·082 2·089 ·958	20 16 22 18 16 17 15 14 13	12 17 16 22 16 22 17 15 17	
Total	296.889	296.070	455.1	457.9	832	832	50.4	50.7	33.3	34.0	21.932	24.882	165	164	
average	29.688	29.607	45.5	45.7	83	83	5	5.4	3.3	3.4	2.192	2.488	16.5	16.4	

The rate of mortality from scarlatina in Belfast during the months of November and December was very high; in February and March it was still higher.

I found that the disease was nearly altogether confined to children under the age of ten, and that the greatest mortality occurred between the ages of two and five years, the next greatest between four and seven, and the least in infants. I am inclined to the opinion that the epidemic was not imported into this town by contagion, but that it arose spontaneously, and spread by certain favouring circumstances, such as the exposure of the poorer part of the population to the unhealthy vapours caused by the decaying of animal and vegetable matters, from the heaps of filth and rubbish about their houses, deficient drainage, and over-crowding; and I am inclined the more readily to this opinion by considering the localities first affected. I find that the epidemic made its appearance in low-lying streets near the river, where the drainage was very imperfect; from this it rapidly spread by contagion till the whole town became implicated.

I believe that epidemics of this nature usually commence in the summer and autumn, as in these seasons of the year the heat is most intense, which, acting on the putrefying animal and vegetable matters that abound in the low-lying, badly paved, and dirty streets, quickly eliminate very dangerous gases, which are decidedly injurious to a population predisposed to disease by intemperance, improper food, and over-crowding. The epidemic having once established itself, I believe it spread more rapidly during the winter months, as at this season of the year the population are kept more in their houses, the windows and doors are usually closed, so that the injurious influence of over-crowding is much worse at this season; and the more inclement the weather, the greater will this evil be felt. It is children in the first place that the disease usually attacks, as they are continuously kept in the house at this season; afterwards the disease will spread by contagion to the other inmates who have not been rendered innocuous to it by a previous

I spoke in a former part of this paper about the great tendency of the epidemic to spread, and in endeavouring to explain this fact, I would offer the following considerations:—In the first place, if the exhalations from the lungs and skin of healthy persons, when concentrated by overcrowding, are sufficient to cause disease, how much more so when these exhalations proceed from individuals suffering from scarlet fever;—it is sure to spread the malady; and I have remarked that in those houses where the inmates were most numerous, and the contaminated atmosphere very imperfectly diluted with fresh air, by keeping the doors and windows carefully closed to exclude the cold, under these circumstances the most injurious results were sure to follow, and the disease assumed its most malignant character. Dr. Charles F. Routh, writing in the British Medical Journal, January 22nd, on the prevention and treatment of scarlet fever, states that the poison of scarlet fever was second only to the virulence of small-pox. Furniture infected with scarlet fever has conveyed the disease six months after use, and houses at longer periods than this after occupation. He says—Where the proximity of person to person was 402 meters, the deaths, to a thousand living, were 14; where it was only 23, the deaths were 28 to 33; and in some very unhealthy places, the mortality was beyond what proximity of persons could explain, and was clearly due to local causes. This state of things can only be remedied by reducing the number of inmates, and keeping the houses in thorough ventilation by efficient sanitary regulations. I believe that the mortality in our large towns, from this and other epidemics, would be greatly reduced by improving the habitations of the people, by a more efficient supply of water and fresh air, and by some method of utilizing the sewerage, so as not to pollute our rivers and streams, causing them to eliminate gases which are dangerous to life and health.

SOME GENERAL REMARKS UPON THE RELATIVE FREQUENCY OF SKIN DISEASES.

By Howard F. Damon, M.D., Physician, Department for Skin Diseases, Boston City Hospital, U.S.

THE following table contains the statistics of over two thousand cases of cutaneous affections observed by me in the Department for Skin Diseases at the Boston City Hospital during the past two years. Some general remarks will be

appended relative to the frequency of certain skin diseases and their causes. New and peculiar methods of treatment will also be noticed, together with whatever may be of interest in my researches to Dermatologists abroad:—

Tarama		. 488	Hypormathogia	9
Eczema,	0 0	000	Hyperæsthesia,	
Syphilodermata,	0 0	203	Stearrhœa simplex,	9
Impetigo,		189	Varicella,	8
Phytodermata,	0 0	172	Pemphigus,	8
Urticaria,	0 0	147	Nævus arteriosus,	8
Erythema,		107	Dermoid Cyst,	8
Furunculus,	0 0	94	Scrofuloderma,	. 7
Scabies,	• •	77	Varioloid,	6
Acne,	6 0	61	Anthrax,	6
Lichen,	9 0	60	Verruca,	6
Zoster,	0 0	57	Epithelioma,	6
Pediculi,	0 0	39	Sycosis,	4
Psoriasis,	* B	37	Roseola,	4
Erysipelas,	0 0	36	Ambustio,	4
Prurigo,	• •	36	Nævus venosus	4
Lupus,	0 0	30	Hirsuties partialis,	4
Ephidrosis,	• •	27	Excess of pigment,	4
Scarlatina,	• •	21	Bronzed skin,	4
Hæmorrhagiæ Cu	taneæ,	21	Kelis,	4
Chloasma,		18	Asteotodes,	4
Alopecia,	• •	16	Miscellaneous,	23
Rubeola,	• •	14		-
Ecthyma,	• •	10	Total,	2100

As regards the relative frequency of certain skin diseases in England and in this part of the United States of America, my statistics will furnish some grounds for comparison. climate of New England is peculiarly favourable to the production of those diseases of the skin which depend upon sudden changes in the temperature and hygrometric conditions of the atmosphere. The per-centage of such skin diseases seems to me to be much larger here than in the mother country. I will mention some of the skin diseases which appear to be increased both in frequency and severity by the rapid thermometrical changes in the condition of our atmosphere, especially in Boston and on the neighbouring sea-coast. Foremost amongst these cutaneous affections is erythema, which is so prevalent here, and frequently assumes such a grave form, as to occasion the belief in its endemic origin. Next in numerical importance is furunculus, then come lichen, zoster, and erysipelas. Urticaria,

which is of great numerical importance, is due both to the effects of sudden and extreme changes of temperature on the nervous system and skin, and also to the habits of the people as regards their choice of food, and the time given to its preparation and ingestion. The above-named diseases form rather more than one-fifth of the cutaneous affections observed by me during the past two years at the City Hospital.

From a comparison of my table with those of the English observers, I am led to the conclusion that erythema is two or three times more frequent in this part of America than in England; furunculus four times, zoster twice, and urticaria five times.

Some years since, Professor Wood, of Philadelphia, advanced the opinion in his work on the "Theory and Practice of Medicine," that the disease described by Dr. Durkee as erythema papulatum et tuberculatum is a variety of lupus. Nothing can be more erroneous than this view. Neither does the description given of the disease by Dr. Durkee, nor any of the subsequent observations made by him and by myself justify such an opinion. The erythematous character of this disease is its most prominent pathological feature; and the disease must be seen to be properly understood. As far as we can learn, this form of erythema is more frequent in New England than elsewhere. Indeed, it seems to be endemic here. We could well wish it were otherwise; but such is our share in the natural and geographical distribution of skin diseases.

Furunculus, zoster, urticaria, and erysipelas are all far more prevalent and severe in New England than the same forms of disease as usually described by English, French, or German writers. This phenomenon must be attributed to the peculiarities of our climate. Here let me say, that these peculiarities of climate, and their effects on the course and development of certain cutaneous diseases, constitute the chief feature in my present dermatological studies. You will pardon my brevity on this point, for it opens a field so new and comparatively unexplored, that its further consideration must be reserved for some future paper.

In regard to new methods of treatment of cutaneous diseases, it would be difficult to say what is entirely new on this subject. Our chief reliance is placed in the discriminate use of iron, arsenic, or the iodide of potassium in those cases where the

disease is not a purely local one. The muriated tincture of iron, and Fowler's solution of arsenic are used in the anæmic and asthenic cases in conjunction with local remedies. A routine system of treatment has been avoided as much as possible, and purely empirical remedies are looked upon with distrust. The student is inculcated in the use of a rational system of therapeutics, based as much as possible on the knowledge of the physiological action of drugs. With reference to particular diseases, a few facts will suffice for the present communication.

Nearly all of the cases of dermato-syphilis have been treated by the internal use of the iodide of potassium, sometimes alternating with the muriated tincture of iron. My plan is to give the tincture of iron before meals, and the iodide of potassium about an hour after meals. No ill effects have ever shown themselves from this use of these remedies, whatever hypothetical notions may exist in regard to their incompatibility when introduced at nearly the same time into the system. marked beneficial effects of this plan of treatment have been chiefly due to the cases treated, which were almost all of a chronic character. In the local treatment of dermato-syphilis, mercurial ointments have in no instance that I now remember been used. Powders of the oxide of zinc and starch, the benzoated oxide of zinc ointment, together with the occasional use of black wash, have, with the internal remedies employed, sufficed for all cases. Syphilitic ulcers have generally required rest in the wards of the hospital.

Impetigo has rapididly yielded to tonics, more especially the muriated tincture of iron in moderate but often repeated doses.

Phytodermata, such as herpes circinatus and iris, have disappeared in consequence of one or two applications of the ethereal tincture of iodine, with an interval of three or four days between the applications.

Lupus erythematosus has also been treated by similar applications of the ethereal tincture of iodine continued for a long period, and occasionally evaporated down to the consistency of pix liquida. This mode of treatment, although less rapid than some, is nevertheless deserving of a trial, since the disease is thus eventually eradicated without any cicatrices being left, as is usually the case where the more potent caustics are employed. Chloride of zinc is applied to lupus vulgaris in the form of a

thin paste with a pointed glass rod, after Squibb's points of the nitrate and chloride of silver have been used to destroy the tubercles. Those cases of lupus in which the ordinary nitrate of silver points are inefficient, yield readily to the chloride of zinc. None, however, but the most experienced should be entrusted with the application of this powerful caustic. These few notes on our dermal-therapeutics must suffice for the present.

ON URTICARIA.

P. F. F. MAURY, Lecturer on Cutaneous Diseases, Jefferson Medical College, gives the following review of urticaria intermittens in Half-Yearly Compendium of Medicine, 1869:—

"Dr. Albert Eulenberg, Berlin, and Dr. Leonard Landois, Griefswald, class this disease among the angioneuroses (Weiner Med. Wochenschrift, No. 45, 1868).

"J. Frank (Hautkrankheiten, Leipsic, 1843), first described the febris intermittens urticata, a complication of nettle-rash with paroxysms of intermittent fever; which he saw occur epidemically at Pavia in 1794, and at Wilna in 1812. The eruption generally set in with fever, as in herpes, and vanished during the apyrexia. Ecupis observed an epidemic, and Bourdon and Guérard saw sporadic cases (Union Médicale, No. 138, 1866). In three of Bourdon's cases, two had a quotidian type, but were unattended by fever; the attacks each lasted an hour; quinine speedily put an end to the disease. The third case was that of a woman, æt. 44 years, in whom suddenly one morning a feeling of heat, rush of blood to the head, fear, and oppression, occurred. Sibilant respiration, flushed face; skin covered with hemp-like white elevations, first upon the forehead and temples, then over the limbs. Passing syncope; and the pulse becoming very small. The patient applied cold water, which increased the threatening symptoms. All, however, vanished in about an hour, and the use of quinine prevented a return of the symptoms.

"According to Allaire (Gaz. des. $H\hat{o}p$., 1866, No. 137), Mongellas and Brichetau made similar observations. Allaire himself saw, in a boy æt. 5 years, after pertussis, regular attacks of quotidian fever, in which, from the second attack, urticaria spread over the body, being most intense on the face. Sulphate of quinine effected a cure.

"Tobold, of Berlin, stated that he had seen a real urticaria intermittens of the face and upper extremities occur in the course of a case of diphtheritis pharyngea. The eruptions recurred on four consecutive days, between the hours of 12 and 1 p.m., and were attended by an intense increase of fever; pulse reached 140.

"Falger (Virchow's Archiv, xxxiv., 123—235) publishes a case of intermittent urticaria, in which there was present endemic larvata, with redness and swelling of the hands, particularly at the articulations, and impeded motivity of the same. Falger regarded the condition of the skin as urticaria, as he had not infrequently observed this eruption in cases of intermittent fever of a high grade.

"The patient's previous history showed that when eight or nine years of age he had, while overheated, plunged into a very cold stream of water; he was pulled out in a fainting condition, and was seized with a high fever, attended by redness and swelling of the skin, and stiffness of the joints. The fever left him in a few weeks, but the swelling and stiffness of his limbs did not depart until much later; and had returned every year since, two or three times, with symptoms of larvata.

"Quinine reduced the skin disease very much, and in subsequent recedives the febris intermittens came without it. The cerebral symptoms which were observed in a few cases are particularly worthy of remark, and point to sudden changes in the supply of blood to the nerve centres. Congestion, fainting, &c., are not peculiar to this form of the disease; our authors observed the same in a case of urticaria, which undoubtedly arose from passing indigestion. In this case the eruption developed in the course of an afternoon and evening in an aged female, and spread rapidly over almost the whole body, excepting the head. It was attended with appearances of stormy excitement, fear, cerebral congestion, &c. On a diffuse red base stood numerous shining prominences, of greater or less size. After six or seven hours, the exanthem vanished almost suddenly, and this was attended with fainting, an almost imperceptible pulse, and temporary unconsciousness. On the following day a light feeling of indisposition alone remained. It is not difficult to discover the causes of these phenomena, when we remember that this was a case of urticaria alba, as well as Bourdon's case, and, therefore, a state of vascular spasm, with local anemia. If the spasm occurs simultaneously in the capillaries of the whole integumentary surface, or in a large portion of the same, the peripheral current is, of course, much diminished at once, and the tension in the other divisions of the arterial system is heightened correspondingly, in consequence of which the internal organs receive an increased supply of blood, and we may thus easily have appearances of hyperæmia of the brain. And this may just as rapidly change into an anemia of that organ, when the constriction of the capillaries of the skin suddenly yields, and is succeeded by a condition of relaxation; the blood then flowing with greater intensity into those dilated vessels.

"Bourdon erroneously ascribed the symptoms caused by the latter condition to recession of the eruption."

To the above observations we would merely add that urticaria seems in some cases to differ only from herpes zoster in the fact that in the latter the ædema ends in vesicular eruption. Hebra* has seen cases of urticaria in which bullæ developed themselves

^{*} Allg. Wien. Med. Zeitung, No. 2, 1858.

upon some of the wheals, the belb being merely the result of the pathological process—exudation of serum beyond its usual limits.

Eulenberg however believes that—

- "Herpes zoster is a vaso-motor neurosis in the superficial cutaneous layers, an 'exanthematous angioneurosis.'
- "The vessels (the arteries, in severe cases also the veins) in the affected portion of the skin are during the eruption in a state of dilatation, relaxation; their tonic innervation is diminished, or for the time interrupted."
- Dr. Chapman (Medical Mirror, June, 1870), writing on neuralgia, thus remarks regarding cutaneous eruptions:—
- "I have already adverted to skin affections consequent on neuralgia through the medium of the negative motor (vaso-motor) nerves, which deprive the affected part of its normal supply of blood; but there are other cutaneous disorders of an exactly opposite kind associated with neuralgiaviz., those which are produced by excessive action of those positive motor nerves which are the causative agents of the nutrition of the skin. When the centric hyperæmia of sensory nerve cells, which is the proximate cause of the neuralgia, is extended to adjoining cells, presiding over cutaneous nutrition, morbid phenomena of various kinds may be induced, but their most typical form is Herpes, and especially Herpes zoster, or shingles. which is now almost universally admitted as being often due to a neuralgia. Rayer, G. Simon, Notta, D. Parsons, Delioux, Romberg, and Parrot, have related many cases which leave no doubt on this point. Hasse mentions, besides the zona, the following skin affections as having been caused by neuralgia, erythema, pemphigus, and urticaria. Dr. Inman observes that 'severe pleuritic pains precede and follow the occurrence of herpes zoster for a considerable period;" but I apprehend that in the majority of cases when these affections occur in connexion with each other, the neuralgia is the primary, and the herpetic eruption the secondary phenomenon. Urticaria very often occurs as an associate of dentition, and is of course caused in this case by the extension of the hyperæmia induced in sensory nerve cells by dental irritation, to cells related to positive motor nerves effecting the nutrition of the skin; and it is therefore easy to understand how centripetal irritation of the ordinary neuralgic type may also originate urticarial eruptions. Moreover, as is well known and stated by the best authorities, both herpes and urticaria are not only produced by reflex action originating in a variety of physical causes, but are also the products not unfrequently of strong mental emotion. A due consideration of these facts cannot fail to enforce the general proposition underlying all that has been said in this chapter-viz., that wherever may be the apparent seat of any neuralgic affection, its real one is in some part of the cerebro-spinal axis, except perhaps in certain rare cases, when ganglia of the sympathetic are primarily implicated."

The same gentleman (Medical Mirror, August, 1870) records

a case of urticaria, together with headache, sickness, &c., cured by means of the spinal ice-bag. He says:—

"Mrs. B., æt. 48, consulted me June 20, 1870, when suffering from a copious eruption of nettle-rash diffused over her face, neck, arms, and hands. She also complained of violent headache, and of retching and vomiting, which was especially troublesome each morning.

"When nine years old she was attacked by a dog, and was extremely frightened; she seemed to lose all her strength; became speechless for a time, and, when she recovered her power of speech, she was unable to speak without stuttering until about three years after her fright. About six or seven days after it she had an attack of nettle-rash, which she is sure was caused by it, and ever since it happened she has had on an average two attacks of nettle-rash each year. 'Before each attack I seem,' she said, 'to sicken for it three or four weeks, and have headache—a kind of swimming or dizziness, often taking away my eyesight, and making me almost delirious.' She also frequently experiences, she said, a sudden stiffness in her limbs during the same preliminary period. She declared that she never perspires, and that so far as she can remember she never has since the period of her fright, however hot the weather may be. She added that when she gets over-heated her skin burns in an indescribable way, making her feel as if she ought to be bled, and that afterwards it cracks in those places which have been most troublesome, as if it had been inflamed. This statement was confirmed by her sister, whom I also saw when the patient first consulted me. She complained, too, that her abdomen is habitually and largely swollen, and that this disorder distresses her greatly. She has suffered from leucorrhœa for many years; and her business compels her to stand during the greater part of each day. The discharge is so profuse that it saturates her stockings, and often compels her even to change her boots. She menstruates regularly, and with but little pain. She suffers from habitual prolapsus uteri—the mouth of the womb often protruding through the os vaginæ. Aching in the back, and a distressing sense of bearing down are incessant. She is also much troubled with swelling of the legs every day.

"I ordered the application of ice along the whole spine during sixty minutes three times a day—the morning application being continued during and after her breakfast, which during many previous mornings she had vomited."

From this date the case progressed favourably. Dr. Chapman, in his comments, informs us that—

"This is the first case of nettle-rash which I have treated, and probably the first that has been treated by means of the spinal ice-bag. Holding the views I have elsewhere expressed concerning the part played by the nervous system in the process of textural nutrition generally, and therefore in the nutrition of the skin, I was prepared for the result recorded; indeed, it was because I anticipated it, that I eagerly persuaded the patient to allow me to treat her as I have described.

"The number of cases of headache, sickness, drum-belly, and leucorrhea, which I have cured by means of ice alone, is already so great, that in respect to these affections, my confident expectation was no more than justified in the present case. The modus operandi of the spinal ice-bag in curing headache may be easily understood by every physician who acquaints himself with those general principles of neuro-therapeutics which I have introduced. The chapter on the "Physiology of Vomiting" in my book on "Sea-sickness," affords an adequate explanation of how ice along the spine stops sickness; and the doctrine of the innervation of glands expounded in the introduction to the same book, contains the reasons which led me to treat leucorrhea through the agency of the nervous system, and supplies the rationale of the success of that treatment. I have as yet published nothing concerning the pathology of that condition, best described in the homely phrase, "drum-belly," but I have given much attention to the subject, and hope before long to throw some light on its mode of production and to show how the spinal ice-bag operates in reducing it. I have several times verified the fact that simple prolapsus uteri may be greatly lessened, or wholly cured, by means of ice; and it appears to me probable that when ice to the spine operates beneficially in these cases, it does so by causing, through the agency of the vaso-motor nerves, a considerable increase of circulation and nutrition in the whole of the pelvic viscera, and therefore, inter alia, in the ligaments of the womb, which thus acquiring fresh tone and strength, are again enabled to sustain the organ in its normal position. But whether or not this explanation be correct, the fact itself is indubitable.

"The cessation of the chronic swelling of the lower extremities recorded in this case may, perhaps, be accounted for by saying that when the general health of the nervous system was improved its influence over the textural nutrition, and therefore the systemic capillary circulation was sure to be improved also. I offer this suggestion as a provisional explanation, which seems to be satisfactory, but which increasing knowledge may, of course, prove to be incorrect.

"The most remarkable phenomenon in this remarkable case is, however, in my opinion, the production of perspiration by the use of the spinal icebag. I call this phenomenon the most remarkable, because, as a general rule, while heat along the spine tends to promote perspiration, ice tends to stop it. I explain the production of perspiration by means of heat along the spine by assuming that what I call the "positive motor nerves" presiding over the sweet-glands are, by the influence of the heat, rendered additionally active; but, of course, this assumption involves another, viz., that cold to the spine operates in the contrary way, and as a matter of fact it generally does so. But here is a case in which ice along the spine causes a person who, during many years has suffered much from the want of perspiration, to perspire freely. How is this? I can offer no explanation with confidence that it is correct. To me the phenomenon remains as mysterious as it is interesting, and shows how much we have yet to learn of the nature of the relation between the nervous system and the processes of secretion, especially the process of perspiration. It has, however, seemed to me possible that since the fright and shock sustained by the patient, the

delicate muscular tunic of the blood vessels supplying the sweat-glands, or it may be of the ducts of those glands, had remained in a condition of chronic spasm, and that the effect of the ice, by abolishing the morbid irritation of the vaso-motor nerve centres, consisted in releasing that muscular tunic from the influence of that irritation, and thus in allowing it to assume that state of healthy dilatation which is a necessary condition of normal perspiration. I must add, however, that this is not the only case in which perspiration has been produced by the use of ice, but it is the only case, so far as I know, in which the patient was previously suffering from a burning skin. Of course, in cases in which the skin, before treatment, is markedly anæmic and cold, owing to vigorous contraction of its blood-vessels generally, ice to the spine, by putting a stop to that contraction, will cause the sweat-glands as well as the other parts of the skin to be supplied with blood, and will thus make the skin warm and re-establish perspiration at the same time."

Bazin, and other French physicians, look on urticaria as a manifestation of "Dartre." The wheals occurring under the influence of mental emotions are pale, but in the arthritic variety are deep red, complicating rheumatism. In urticaria, the muscular spasm of the skin is considered to be occasioned by irritation of the deeper filaments of the cutaneous nerves—which nervous condition probably helps to cause the formation of wheals—these elevations being due, according to the late Dr. Buchanan,* to a circumscribed ædema of a cluster of capillary loops springing from a common stem, and under the influence of a common nervous twig.

The skin, in chronic cases, may be pigmented; and Dr. Spender, in his book on ulcers, writing on pigmental deposits, informs us, at page 15, that there is a nerve-element in the case which must not be ignored; for, according to Mr. Hilton, pigmentary degeneration represents a neurose derangement, leading not to an alteration of nutrition, but to a degradation of it. And we are further reminded that it is to be looked upon as a local index of diminished physiological force—a sign, so to speak, of loss and waste occurring in a circumscribed area of tissue, denoting early embarrassment. The cuticular epithelium, owing to blood changes, is fed with a lower than the normal quality of hæmatine, and textural metamorphosis becomes less free.

Urticaria has been called a pruriginous neuroses of the skin, on account of the symptoms complained of, and also from its

^{*} Edinburgh Medical Journal, January, 1863.

pathology. The affection, except in chronic cases, which often depend on a rheumatic or gouty diathesis, is of short duration. It is ushered in after eating certain kinds of food—as lobsters, shell-fish, almonds, &c., by a feeling of fulness at the stomach, nausea, headache, quick pulse, &c.; in which cases the eruption is a reflex irritation proceeding from the stomach, and under the control of a plexus of the sympathetic system.

In conclusion, we may refer to the report of a case of intermittent urticaria under the care of M. Dumontpaltier, recorded in this Journal, Vol. I., page 357.

REVIEWS.

Eczema: its Nature and Treatment. By Tilbury Fox, M.D., Lond., M.R.C.P., Fellow of University College, Physician to the Skin Department of University College Hospital. London: Henry Renshaw, 1870.

THE papers contained in the above-mentioned work originally appeared in the T nally appeared in the Lancet, being the Lettsomian Lectures for the Session 1869-70. Dr. Fox has added an introductory chapter on "Modern Dermatology," in which he very properly points out some of the "bad habits" of Dermatologists, especially the tendency to introduce new names. The first lecture treats of eczema as a standard of comparison for other diseases. Of Willan's classification, he says:--"For some years the Willanean system in principle has been vigorously attacked, especially by foreign writers, whilst none of our countrymen have been found defending it. The assault upon it has been directed, in the first place, against the item 'eczema' in particular. A reaction seems to me impending, for the simple reason that observers are discovering that this system is capable of such development as will make it the best natural division of the diseases to which it relates. My strong belief, after careful clinical observation and considerable thought, is that on the whole Willan's rendering of eczema-which has been greatly misinterpreted—is the most philosophical, the truest to life, and compares favourably with the endless divisions

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and readings of that disease as given by modern authorities." Dr. Fox then proceeds to compare the doctrines of Hebra, Wilson, and others with the views held by Willan. Our author defines eczema an an "inflammatory (catarrhal) affection of the skin, which is mainly characterised by a peculiar discharge, stiffening linen, and drying into thin yellow crusts. It has its stages in the fully developed disease of erythema, papulation, vesiculation discharge, pus formation, and squamation, which may each under different circumstances be more or less pronounced." Induration, fissuring, edema, &c., are only to be regarded as secondary results; the essential features of eczema being the free vesiculation, or the occurrence of a special exudation, which raises the cuticle into vesicles, and which Dr. Fox believes principally attracted Willan's notice.

The second lecture treats of the morbid anatomy of eczema, etiology, hereditary transmission, &c., &c. This lecture contains much new and original observation. Our author agrees, with Hebra and others, that in eczema it is faulty innervation which is the most important element in its production, inducing cellproliferation. If this, then, be the case, the existence of a "dartrous or eczematous diathesis is not only unnecessary, but unproven. It must be remembered that I have said that constitutional conditions may influence eczema." Some very judicious remarks are made upon the connexion of a gouty habit with the occurrence of eczema, and we are perfectly at one with Dr. Fox as regards his method of treatment,—and, like him, we use arsenic sparingly, indeed to a certain extent we have lost faith in it, except for one complaint, viz., lepra. Eczema seems to be the favourite subject for dermatological discussion just now; three or four years ago it was the dermatophytic diseases; at any rate very few could be found to say that our knowledge of either is perfect. In conclusion, we may add that our author has shown himself to be both a successful dermatologist as well as an accomplished physician, and we cordially recommend his monograph to the profession.

Consumption, as engendered by re-breathed air, and consequent arrest of the unconsumed carbonaceous waste: its Prevention and Possible Cure. By Henry MacCormac, M.D. Second Edition. London: Longmans, Green, & Co.

R. MAC CORMAC'S views on the nature and treatment of phthisis are so well known that any lengthened notice on our part would be superfluous. The author believes that consumption and scrofula are in every essential one. "Tubercle," he says, "in its varied protean guises, is but the result of the blood's deterioration, of the retention of the carbonaceous, hydrogenous, and other impurities." At page 3, we are informed that tubercle—in other words, the arrested, because unburnt carbonaceous waste, is the substance and no other, whose presence entails consumption and scrofula in every degree, "for without tubercle there can be no scrofula, and without unburnt carbon there can be no tubercle. Tubercle induces not merely scrofulous outbreaks and consumption proper, but also occasions eruptions about the ears and nose, otorrhea, tarsal and general ophthalmia, cutaneous and sub-cutaneous deposits, and structural changes." To prevent the ravages of these diseases, if not entirely to eradicate them, Dr. MacCormac believes that we should carefully eschew and avoid a pre-breathed atmosphere, which object is to be accomplished by plenty of out-door exercise, and good ventilation in our rooms, especially in our bed-rooms. We may add that the book contains a vast amount of information that will well repay perusal.

Ninth Annual Report of the Dispensary for Skin Diseases, Glasgow. 1870.

R. M'CALL ANDERSON sends us his report for last year. During that period, "1,076 cases of skin disease have been treated at the dispensary;" the whole number admitted since the foundation of the institution in 1861 is now 9,771. Appended to the report we have a classified list of the diseases treated, from which we perceive that 151 cases of favus have been under treatment during the last nine years, 12 cases of which occurred however during 1869, and only 3 of sycosis.

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Impetigo contagiosa, a disease first described by Dr. Tilbury Fox,* was met with in five instances. We are glad to perceive that a large class of students attend the practice of the dispensary, thus testifying to its usefulness as an educational institution. Appended is the table of cases treated during the last nine years:—

Eczema,		2,332,	or	1 in	. 5	Herpes,	6 0	30,	or :	l in	326
Scabies,	4	2,418,	,,	2.2	4	Pityriasis versicol	lor,	100,	99	9.9	98
Dermato-struma,	in-					Tumores cystici,		24,	2.2	22	407
cluding lupus,		451,	,,	,,	22	Pemphigus,		12,	2 2	,,	814
Dermato-syphilis	,	485,	,,	2 9	21	Favus,		151,	,,	2 2	65
Ulcera,		424,	,,	,,	23	Epithelioma,		33,	,,	22	296
Phtheiriasis,	• •	315,	,,	9 9	31	Seborrhæa,		12,	,,	,,	814
Dermatitis, inclu	Verruca,		28,	22	99	349					
ing pernio, ery	si-					Alopecia,		182,	2.2	,,	54
pelas, &c.,	• •	37,	2.7	22	27	Ecthyma,	• •	95,	,,	99	103
Lepra (psoriasis),	• •	674,	,,	,,	15	Sycosis,		17,	,,	,, !	575
Furunculus & anth	ırax	343,	,,	22	29	Molluscum sebace	um	, 6,	,,	1,6	328
Tinea circinata a	nd					Purpura,		7,	2 2	1,8	367
tonsurans,		118,	,,	,,	83	Nævus,		10,	,,	,, (977
Urticaria,		138,	,,	,,	71	Spargosis		7,	9.9	1,8	367
Onychia,		9,	9 7	1,0	086	Ichthyosis,	• •	28,	2.2	99 €	349
Erythema,	• •	454,	2.2	,,	21	Cornu cutaneum,	• •	1,	2.7	9,7	770
Acne	• •	301,	2.7	,,	33						

The New York Medical Gazette. A Weekly Review of the Medical Sciences. Vol. IV.

SEVERAL excellent communications are contained in the 4th volume of the Medical Gazette. In the number for March 5th, 1870, we have a lecture by Professor Frank H. Hamilton, of the Bellevue Hospital College, on Encysted Tumors. He says that cysts may be divided into unicancellated or unilocular—that is to say, cysts containing but one cavity; and compound or multilocular, containing many cavities. The latter may originate by the formation of secondary cysts in the walls of the parent cyst, or by the formation of secondary cysts upon the internal walls of the old cyst. Dr. Hamilton then proceeds to speak of cutaneous encysted tumors which are incapable of multiplication:—

^{*} JOURNAL OF CUTANEOUS MEDICINE, Vol. III., page 231.

"Each hair follicle is perforated by the duct of one or more sebaceous glands; but some of the sebaceous glands open directly upon the surface of the integument, without communicating with a hair follicle.

"Each hair follicle and independent sebaceous gland is lined by a delicate epithelial membrane, continuous with the superficial tegumentary epidermis. The matter secreted by the tegumentary sebaceous glands is composed of fatty matter, and various salts of lime, magnesia and soda. Virchow describes the secretions from these follicles as a fatty or oily degeneration of the epithelium cells; that is to say, the cells perish and fat is set free. The hair follicles produce epithelium cells also.

"If from any cause the excretory duct of one of these glands becomes closed, the secretion accumulates and forms a tumor. Sebaceous tumors occur most frequently upon the scalp, commencing usually after adult life; but they may be found occasionally wherever such glands are situated. They seldom attain a greater size than from one to two inches in diameter. They are round, smooth, more or less elastic, according to the thickness of their walls, and the character of their contents; they are painless, without tenderness or discoloration, unless pressing upon nerves, or accidentally inflamed.

"Their growth generally ceases after they have attained a certain size; and when they occur upon the scalp, the hair usually falls off over the tumor, and is not reproduced. The same person has frequently several of these tumors existing at the same time, and this is especially apt to be the case upon the scalp. In a few cases a small black spot, or indentation upon the top of the tumor, indicates the point where the hair originally protruded from the follicle; and at this point the cavity of the sac may be entered by the point of a pin.

"In old sebaceous encysted tumors, the surface sometimes is covered with enlarged arterioles, and venous radicals, which might lead to a suspicion that they were vascular growths, but upon vascular growths the hairs are generally larger than upon other corresponding parts of the body, while upon these tumors they are smaller, or absent altogether.

"After removal, sebaceous tumors are found to be composed of the original follicle, including perhaps its excretory duct, dilated and thickened; containing only its normal secretions in various stages of desiccation, in consequence of absorption of the more fluid portions. The process of desiccation or of thickening of the contents appears, however, to have its usual limitation in those conditions which Abernethy termed atheromatous, or steatomatous; and from this point a process of liquefaction commences, usually first in the centre, and extending finally to the whole of the contents, so that old encysted tumors of this class are, in general, more fluid than those of younger growth; the contents are then said to be melicerous, or honey-like. The process of fluidification is also more rapid towards the most projecting point of the surface than in other directions.

"Occasionally these tumors contain one or more aborted hairs, which are no doubt successive growths from the remnant of the hair follicle. In congenital encysted tumors, which are especially frequent over the external angle of the eye, not only numerous small hairs are found lying detached,

but in some examples which I have seen, there were numerous hair follicles within the interior of the sac containing short hairs still attached. It is probable that these are examples of involution of tissue.

"Treatment.—Sometimes the sac becomes inflamed, and suppurates, resulting in a spontaneous discharge of the contents, and perhaps in a complete cure; or it opens at its apex by absorption of the integument from pressure of the contents, without the intervention of suppuration.

"Most patients find so little inconvenience from their presence, that they will not consent to their removal. If, however, for any reason it may be thought desirable to get rid of them, the knife is the only proper resort.

"An incision should be made carefully down to the sac, and if possible, its removal should be effected entire. To facilitate this somewhat delicate operation, the surgeon is recommended to make an oval incision upon the side of the tumor, and not directly across the top, where the sac is in general the thinnest; or in case the excess of integument will warrant it, to make a double elliptical incision, leaving the central portion attached to the tumor."

We find in the same number some interesting remarks by Professor Boeck on syphilization. He says:—

"Dr. Garrish has asked me if it is possible to cure hereditary syphilis by syphilization. I will first remark that many children born with hereditary syphilis, suffer from diseases of the internal organs, especially in the liver and in the lungs, and therefore could not be cured by any method whatever, but when there is no disease in the internal organs, a great many of them are cured, and I know no method which cures them with more certainty than syphilization. Little children do not suffer much by this treatment, as the pustules and sores are very small, and cannot in any way be compared with those which are produced in adults by the treatment. Regarding the treatment of children, there is one point which must be closely observed; that is, that the inoculations do not take well at first. It is then necessary to make inoculations every day until they commence to take, after that time the inoculations are made every third day, as with adults."

Dr. Van Buren contributes a series of lectures on diseases of the rectum and anus, with regard to that troublesome affection, pruritus ani. Dr. Buren thinks that it is frequently parasitic, on which point he believes that—

"There is one point of practice, recently taught us by German dermatologists which you must never lose sight of; that is, the possibility of the presence of a parasitic plant or insect in the altered epidermis of the affected part, by which the disease and consequent itching is kept up. There is a form of eruption called by Von Hebra, 'eczema marginatum,' with elevated edges and well-defined margin, which has existed in the most obstinate cases of pruritus of the anus I have encountered. If you rub these scurfy margins with a little glycerine thoroughly, and then scrape off a drop with the edge of a dull scalpel and place it upon a slide under the microscope, you will recognise the spores of a parasitic plant, which is growing like a weed in the diseased scarf skin. If you kill this vegetable growth, the

chronic inflammation of the skin will straightway get well, and to do this use the solution of *sulphurous* acid as prepared by Squibb, for sulphur is the best of all parasiticides, and this the best form in which it can be applied. Sop it on two or three times a day, at first diluted with an equal quantity of water, afterwards stronger if well borne, and within a week, the obstinate disease will have taken its departure. I saw a lawyer from the west a few weeks since, who had suffered "more than tongue can tell" for nine years with this disease; it interfered with his professional success, and impaired his general health, which was otherwise good. He had "tried everything" but sulphurous acid. Another gentleman who had suffered for several years in this manner whom I saw with my friend, Dr. W. H. Draper, got well promptly after using the parasiticide."

But the disease frequently arises from other causes than parasitic. Congestion of the portal system, and derangement of the liver have in our practice been the most common.

Clinical Record.

ATROPHY OF SKIN AND MUSCLES OF FOREARM.

Under the care of Dr. H. S. Purdon.

THE following case presents one or two points of peculiar interest, and is briefly recorded:—Jane M'E., æt 16, admitted at the Hospital for Skin Diseases under the care of Dr. H. S. Purdon, December, 1865, for extensive ulceration of left forearm, supposed to be strumous; duration of disease two years. The patient was a pale, delicate, anæmic-looking girl, had never menstruated, and lived in an unhealthy part of the town. Her relations are all healthy. She could not attribute the disease to any cause. Stated that it began as an "income," which broke and left a small superficial "sore" that had gradually spread to its present extent, in length about five inches and between three and four in width. The ulceration had a peculiar velvety look and feel, secreted a little sanious matter, but gave no pain. The edges were bevelled off, and in colour of a violet hue. The treatment prescribed was cod-liver oil and syrup of the iodide of iron, locally zinc ointment and balsam of Peru. After an attendance of three months' duration in which little progress was made, the patient was lost sight of till January 1870, when she called again to show her arm. She was now

much fatter, and stated that after leaving the hospital she went to reside at the sea-side when her arm began slowly to improve, leaving, however, a permanent stiffness of elbow joint. About a year ago she began to notice that, in addition to the stiffness just mentioned, there was impaired motion, the arm and hand gradually becoming weaker, and the new cicatricial tissue rapidly contracting. Certainly her forearm and hand presented a most extraordinary looking appearance, the hand being swollen to fully twice its natural size, dense and brawny to the touch, gritting slowly on pressure; the forearm, in three distinct places, bound down by a dense hide-like skin of a glossy appearance, resembling the affection known as scleroderma, accompanied by atrophy of the muscles beneath—in fact, nothing but "skin and bone" to use the patient's own expression, and the unaffected portions were bulged out to an unnatural extent. Any treatment except amputation would be of little avail.

CASE OF VARIOLA, WITH REMARKS.

Into the Union Hospital, Belfast. Several others occurred amongst the poorer classes, one of which is recorded. Eliza Liddy, aged 25, was seen on Saturday, June 3rd. She exhibited the small-pox eruption in pustular stage on face, especially around alæ of nose, a few being observed on the palate; voice hoarse; on wrists and lower extremities eruption more papular, pustular stage not having commenced; form of disease, variola discreta. The affection was ushered in by the usual symptoms—lumbar pain, headache, &c. The case was of a mild description. A mixture containing liquor ammoniæ acetat was prescribed, and carbolic acid and zinc ointment to face, together with light nutritious diet, and darkened room. For the secondary fever, a mild laxative was sufficient. Period of incubation not ascertained.

For the last few years Ireland has been nearly free from small-pox; during the year 1868 only 23 deaths from this disease were returned to the Poor Law Commissioners, against 2,052 in England and Wales, and 100 in Scotland, whilst in former years it was one of the most common diseases of the country.

This desirable state of affairs has been attributed to the efficient working of the "Compulsory Vaccination Act," which at present is strictly enforced. Compulsory power of isolating small-pox and fever cases would also be desirable.

The outbreak of small-pox in Paris during April, May, and June affords an illustration of the necessity of being vaccinated again, at least on the first approach of the epidemic. The mortality in Europe from this disease before Jenner's discovery was nearly half-a-million yearly.

It may be interesting to add that Dr. Besnier has lately written on the period of incubation of eruptive fevers. It appears that great uncertainty prevails on the subject, Franks citing a case of small-pox that commenced immediately after exposure to contagion. Rilliet and Barthez give the period of incubation of variola at from one to forty-two days. Dr. Besnier, striking an average from the authorities quoted and from his own experience, gives variola a period of from one to two weeks to incubate.

CASE OF COMPLICATED VENEREAL DISEASE.

Under the care of Thomas Ball, L.R.C.P., &c.

March 9th. On examination of the penis I found three well-established chancroids, together with "urethral gonorrhœa" and balanitis, the latter of which produced intense itching, so much so, that it prevented sleep for two or three nights in spite of a full dose of opium. He also had obstinate contraction of the prepuce. My treatment for the chancroids was a saline cathartic, and rest in bed for the first day. Next morning I freely cauterized them with strong nitric acid, followed with water dressing three times daily. I also prescribed the following:—

R Potass chlorat., ... 3ss.
Acid nitro-mur. dil., ... 3iij.
In fusi Cinchonæ ad., ... 3xij. m

Two tablespoonfuls, thrice daily.

Under this treatment with low diet they healed in about a fortnight. On the disappearance of the chancroids the contraction of the prepuce subsided and assumed its normal state; but the itching continued. To relieve this I found the following application of signal service:—

R Ol olivæ opt.

Ungt. cetacei aa., ... 3j.

Hyd. sub chloridi, ... 3ss.

Ext. opii aquosi, ... 3i. m

To be applied night and morning under the prepuce with a camel's-hair pencil.

For the urethral gonorrhea I prescribed the following injection, which I find after long experience to be one of the best:—

 Ro
 Zinci sulphat.,
 ...
 gr. xij.

 Alum sulphat.,
 ...
 gr. xxiv.

 Ext. opii aquosi,
 ...
 gr. xx.

 Glycerini,
 ...
 3j.

 Aquæ ad,
 ...
 3viij.
 m

To be used with a syringe every three hours; also two capsules of copaiba every six hours.

I may further state that I was called to attend his wife for vaginal gonorrhea. My treatment in her case was, first, an injection of

B. Liq. plumbi subacetat. dilut., zviij. Decoct. papaveris, ... zxxiv.

To be used tepid three or four times daily, mild aperients, rest and warm hip baths; subsequently, injections of alum and sulphate of zinc. On the 21st of May I pronounced them both cured.

CASE OF CHRONIC ECZEMA.

By Prof. W. H. DRAPER.

A WOMAN of 48, presents the characteristic ruddy eruption, very well marked, on the right leg and foot. It has existed for thirteen months, and "came of itself." There is considerable thickening and infiltration, and the patient complains of itching and pain. She has always enjoyed good health. She has consulted a number of doctors, and, last and least, the proprietor of a much advertised pain paint. Feels

very indignant at being taken in and fleeced without relief, by the "no cure no pay" caption, verbally made to her. The preparation gave her slight relief at first, but she declares it is composed of nothing but essence of peppermint—not very wide of the truth. The essential oil of peppermint is largely used among the Chinese, and when applied to a seat of pain is, like the patent nostrum of our own country, followed by a sensation of coldness and numbness, which will last for hours, and even days.

Treatment must be both constitutional and local. You may give arsenic if you will, combined with iron and a good diet. Locally, elevate the limb, keeping it as still as possible. We can, however, supplement rest and position by bandaging, being careful to apply it secundum artem, not from the ankle, but from the toes to, if possible, above the knee. In this case, there is some enlargement of the superficial veins, but they are hardly varicose. Some months ago she had a severe hæmorrhage from one of these veins rupturing. The application of a rubber bandage, which will exclude air, will often be followed by a cure of the cutaneous lesion, but I have never tried it. Exposure to air, no doubt, aggravates it. Preparations of the alkalies, tar, and solutions of the sulphate of iron have a good effect. Of the alkalies we may use caustic potash, gr. ii—xl, ad aquæ 3i, applied with a camel's-hair brush, for the purpose of producing pain. If we use a very strong solution, it is to be washed off in from three to five minutes, as the pain is insufferable longer. We may use too the oil of cade combined with zinc, as a drachm of the flowers of zinc to an ounce of benzoated lard, and then use a drachm of this ointment with an ounce of the oil of cade. It at once stimulates and excludes air. I have seen very good effects from the iron. It produces contraction of the motor nerves, and when the circulation is improved, the condition of the part becomes easier. It should be strong enough to cause pain, 3i—iv. ad aquæ Oj, for although the pain is severe, yet there is ultimate relief. It is to be applied about three times a week, and washed off after the pain has lasted for say five minutes. After it we may apply the benzoated ointment mixed with oil of cade. Outside of this we may put a piece of linen, and over that a bandage from the toes to beyond the knee. This should be removed about three times a week, oftener being hardly necessary. Among constitutional tonics we can give iron and arsenic, which should be continued for a good while,

As to the use of arsenic in eczema, and generally in cutaneous lesions, it can hardly be of no use when it has been so largely used with apparent success. In chronic cases the habit of arsenic eating may be acquired, just as of opium or cannabis indica; its abuse for improving personal charms is not unfrequent. Hebra, I am informed, does not now use it, although in his work he advises its use, but not with the enthusiasm of many of the English and French dermatologists, especially the former. It is almost a specific in psoriasis. Fowler's solution is perhaps the best form for administration, in gtt. v doses: arsenious acid is also eligible, one-fifteenth grain doses. The arsenite of soda, made similarly to the arsenite of potassa, has no advantage over it. Sometimes Donovan's solution is given: it has been found especially efficacious in some cases of syphilide, but is apt to produce nausea. Arsenic should always be given upon a full stomach, or after eating, and in small doses, gradually increased.—New York Medical Gazette, June 11. 1870.

DOSES FOR HYPODERMIC USE.

THE following formulas for hypodermic injection are taken from The Cin. Med. Repertory:—

Aconitine (Aconitin, Off.)— \Re Aconitine, gr. i.; aquæ destillatæ purissimæ, f \Im ss. Misce et fiat solutio. Dose: minimum, m ij. = $\frac{1}{120}$ gr.; maximum, m iv. = $\frac{1}{60}$ gr.

Atropine (Atropia, Off.)—R. Atropiæ sulphatis, gr. i.; aquæ destillatæ pur. f \mathfrak{Z} ss. Misce et fiat solutio. Dose: minimum, \mathfrak{m} ij. $=\frac{1}{120}$ gr.; max., \mathfrak{m} iv. $=\frac{1}{48}$ gr. Adapted to pain in pelvicviscera.

Caffeine, Theine.—B. Caffeine, gr. ij.; aquæ destil. bullientis, m lxxx. Misce et fiat solutio. Dose: minimum, m $20 = \frac{1}{2}$ gr.; maximum, m 40=1 gr. Neuralgia and alcoholic insomnia.

Strychnia (Strychnia, Off.)—B. Strychniæ sulphatis, gr. ij.; aquæ destil. bullientis, \mathfrak{z} i. Misce et fiat solutio. Dose: minimum, \mathfrak{m} ij = $\frac{1}{120}$ gr.; maximum, \mathfrak{m} iv. = $\frac{1}{60}$ gr. Gastralgia and neuralgia of heart.

Morphine (Morphia, Off.)—R Morphiæ acetatis, gr. v.; acetici, m i.; aquæ destil. bull. f 3 i. Misce et fiat solutio. Dose: minimum, m i. = $\frac{1}{12}$ gr.; maximum, m vi. = $\frac{1}{2}$ gr. Ten drachms to a drachm can be dissolved by use of glycerine. Especially useful in delirium tremens and neuralgic pains.

Nicotine (Nicotina)— \mathbb{R} Nicotine, gr. i.; aque destil. puris. f \mathfrak{Z} ss. Misce et fiat solutio. Dose: minimum, \mathfrak{m} ij.= $\frac{1}{120}$ gr.; maximum, \mathfrak{m} iv.= $\frac{1}{60}$ gr. Useful in tetanus.

Digitaline (Digitalia, Off.)—Ro Digitaliae, gr. i.; aqua destil. puris. f \bar{z} ss. Misce et fiat solutio. Dose: minimum, m ij. = $\frac{1}{120}$ gr.; maximum, m iv. = $\frac{1}{60}$ gr. Good in febrile conditions.

Calabar Bean (*Physostigma venenosum*).—R Extractum physostigmatos venenosi alcoholici, gr. ij.; aquæ destil. purissimæ, 3 ij.; glycerinæ, 3 i. Misce et fiat solutio. Dose: *minimum*, m $20 = \frac{1}{15}$ gr.; *maximum*, m $40 = \frac{1}{8}$ gr. In tetanus.

Editorial Commentary.

OUR EXCHANGE JOURNALS.

UR contributors will, we have no doubt, be glad to hear that arrangements have been made for the exchange of this Journal with the principal Home, Colonial, and Foreign Medical Papers. By this means our contributors will obtain a larger publicity for their communications than would be gained through a limited circulation amongst our subscribers. We regularly exchange with our contemporaries—the four Dermatological Journals—viz., the "Giornale Italiano delle Malattie Veneree e delle Malattie della Pelle," the "Annales de Dermatologie et de Syphiligraphie," the "Archiv Für Dermatologie und Syphilis," and the "American Journal of Syphilography and Dermatology."

BUTTON SCURVY.

DUTTON SCURVY was the popular name given by the Irish peasantry to a cutaneous disease prevalent in the southern, middle, and western counties of Ireland during the famine years of 1847-8-9. In 1868 we met with a case bearing a great resemblance to this affection. The patient, aged 16, was pale, anæmic, and debilitated; had insufficient and poor food; lived in a dark unhealthy lane in Belfast. The cutaneous disease was characterised by an eruption of isolated excrescences—best marked on the arms—presenting a convex surface somewhat resembling an ordinary button. These excrescences were

about the size of a farthing. On comparing the case with a water-coloured drawing by the late Dr. M'Munn of button scurvy, the resemblance was very striking. This disease was called by Burgess *Ecphyma globulus*.

THE BELFAST SCHOOL OF MEDICINE.

OMPLETE arrangements exist in Belfast for the successful study of medicine in all its branches, and we may safely say that more than ordinary advantages are offered to the student. The usual courses of lectures are delivered in the Queen's College in connection with the Queen's University in Ireland, and clinical instruction regularly given during the winter and summer sessions in the General Hospital, containing 160 BEDS, with separate fever-wards. This hospital is the only recognised one in the seaport and large manufacturing town of Belfast. The Ophthalmic Hospital, 26 beds; the Skin Hospital, 14 beds; the Lying-in Hospital and Lunatic ASYLUM are also open to the student, and Cliniques held in the same. In addition to the establishments already mentioned, we have an extensive Union Hospital, Union Infirmary and Dispensaries, also the Belfast Charitable Society's Infirmary, principally for diseases of advanced life.

The Hospital for Diseases of the Skin, Belfast.—This is the only special hospital in Ireland for the treatment of skin diseases. From the last annual report (July, 1870), it will be observed that 1,097 cases were admitted during the past year. The hospital can accommodate fourteen intern patients. A Clinique for students is held during the winter months.

Tinea Decalvans, or alopecia areata, we believe to be decidedly a disease of non-parasitic origin. We have never been able to detect the *microsporon audouini*. The disease is rare in Belfast. The latest theory is that the alopecia is due to atrophy of the hair-bulbs caused by impaired nerve-power, thus interfering with their nutrition.

Pessema.—Dr. W. D. Moore, of Dublin, informs us that a paper is contained in the *Nordiskt Medcinskt Arkiv*, vol. 2, part 1, 1870, on "Pessema," a new form of skin disease described by

Dr. R. Bergh, of Copenhagen. The disease occurred in a syphilitic woman. The representation given is more like molluscum than anything else, but looks more pustular. The author thinks the disease to be the same as that in the case of a child, æt. 1 year, described by Dr. Beigel in Virchow's Archiv, 3 and 4, 1869, under the name of Papilloma area-elevatum. The name Pessema seems to be far-fetched, being derived from the Greek for a chess or draughtsman.

Dactylitis Syphilitica.—Dr. Locke, of Berne (American Journal of Dermatology), has observed two cases of a curious affection of the fingers and toes, produced by syphilis, which has no resemblance to onychia, and which is developed coincidently with lesions of the osseous system. In one of the cases recorded a man, aged 45, complained of swelling and pain in little fingers and great and second toes of left foot and second toe of right foot. The skin was tense, pale and resistant, and the nail remained unaltered; ulceration of a slight nature in the interdigital spaces was exhibited, as also an extensive rupial eruption. We have at present under notice a case resembling those described by Dr. Locke. Both great toes shortened; ulceration exists between the toes, and a squamous eruption of ten years' duration complicates the disease. We intend, however, to record the case in our next number.

Xanthoma.—Dr. Wm. Frank-Smith informs us that the case of this disease recorded by him in the Journal of Cutaneous Medicine. Vol. III., p. 241, has recently exhibited the hitherto unobserved phenomenon of small tumors in connection with the periosteum of the tibia, similar in size to those on the extensor surface of the knee and elbow.

Messes. L. Rose & Co.'s (Leith) Lime Juice.—Lime juice has long been known as a valuable medicinal agent in curing several diseases. Its effect in preventing, arresting, and curing scurvy is so well attested, that in the navy and in our mercantile marine its use is compulsory, and daily doses to the crew of every vessel are enforced by Act of Parliament. An agent having such valuable effects upon the health of sailors, cannot be regarded as a useless remedy on shore. In all cases where uniformity and a limited variety in diet prevent healthy action,

lime juice is a most admissible agent. In treating patients of the poorer class, medical men sometimes find lingering illnesses superinduced by low diet, and in such cases lime juice would have a specific power in renovating the system. In that long category of complaints originating in the too constant use of one sort of food, lime juice is beneficial. That Messrs. Rose & Co.'s beverages will come into very general consumption cannot be doubted, not only on account of the valuable medicinal properties which they so specially possess, but their excellence is also greatly enhanced from the fact of the patent process adopted by them in preserving their beverages, dispensing entirely with the use of alcohol, thus producing wholesome and most delicious beverages particularly adapted for family use, and especially for the now numerous class of abstainers who have long felt the narrow limits of really refreshing, while wholesome, drinks, entirely free from spirit. In certain forms of cutaneous maladies, connected with, or originating in rheumatism, Messrs. Rose & Co.'s lime juice will probably be useful. In purpura it may be ordered with advantage. The following are the beverages manufactured: -Patent Preserved Juice, Lime Juice Cordial, Lime Juice Champagne, and Lime Juice Citronade. The latter is a capital tonic.

Messes. Kinloch's Genuine Catalan.—We have used both the red and white catalan, and can recommend these wines. The red catalan is very palatable and pleasant to the taste, as well as nourishing; from its low price it is well suited for hospital use. Several favourable reports on "Catalan" have been received by Messes. Kinloch from India, where the wine is largely consumed for hospital use.

Tarragona.—At page 384, Vol. III., of this Journal will be found some remarks on the use of Tarragona in the treatment of eczema, by Mr. Milton. We have prescribed this wine for some time in various skin affections. Mr. Boucher, Castle Place, Belfast, imports the wine direct from Spain. He has a good article at 18s per dozen, which brings the wine within the reach of the poorest.

Moore & Co. (Belfast) were selected to supply the late Workmen's Exhibition with ærated waters, which we need hardly say are still largely consumed. Mr. Yuille has asked us to express our opinion of his "Essence of Coffee." We beg to say that we have frequently used it, and to our mind (although we have no great liking for extracts and essences as a rule) his preparation is superior to the usual run of similar articles.

Messes. Wilmot, Holt, & Co., of Manchester, the great makers of India-rubber goods, have at our suggestion manufactured gloves, &c., for excluding the atmosphere in skin complaints, as recommended by Hebra. Our friends in the North of Ireland can have these articles at their Belfast establishment.

We cannot see why our pharmaceutical chemists should not follow the example of Messrs. Planten & Son, of New York, in using for liquids of small bulk gelatine capsules, and for powders and pills jujube paste, which articles this firm supply for the above purposes.

WE WOULD FEEL GREATLY OBLIGED to our friends and subscribers if they could introduce our Journal to the notice of their acquaintances. We sincerely wish to make our undertaking a truly national one, and popular in every respect.

Miscellaneous Memoranda.

ECZEMA AND ITS VARIETIES.

To arrive at a correct knowledge of the various causes, and consequently successful treatment of cutaneous diseases, is a subject fraught with difficulties. No class of diseases are surrounded by more contending or conflicting opinions than affections of the skin. To give a brief resumé of the various views regarding the disease called eczema will be the object of this paper.

Eczema is defined by Mr. Erasmus Wilson as a "chronic inflammation of the skin, attended with desquamation and pruritus." It is impossible for this condition to co-exist with the healthy nutrition of the affected part. For example, in eczema impetiginodes, the presence of pus is looked on by some writers as due to "inflammatory over-productiveness." On the other hand, Cohnheim's theory is that pus originates in the passage of the enlarged white cells through natural openings in the walls of the dilated blood-vessels; and we are further informed that inflammation cannot occur

without the presence of blood-vessels, the dilatation of which (probably due to vaso-motor paresis) their injection and hyperæmia form the first stage of inflammation.

The anatomical seat of eczema is the Malpighian layer. In eczema artificially produced in animals, one of the first changes observed was rhythmical contraction of the vessels, followed by permanent statis, the part that was before transparent becoming opaque, subsequently exhibiting numerous vesicles. Microscopic examination showed serous infiltration and cell proliferation.* Now what has been termed "functional reaction" of the tissue cells may lead to hypertrophy and hyperplasia; thus, in the words of Mr. Syme,† by diseased nutrition we understand "an action of the capillary vessels, which, instead of preserving the tissue concerned in a natural condition, increase its size and alter its texture." In chronic infiltrated eczema, especially of the lower extremity, the skin attacked becomes hard, thickened, and somewhat tubercular, occasionally described by the name, elephantoid papillary hypertrophy.

In acute eczema the follicles, papillary layer, and superficial layers of the corium are swollen. In chronic cases the skin is thickened, the lines and furrows become deepened, and the papillæ enlarged. According to Mr. Wilson,‡ "eczema is undoubtedly local in those instances in which it proceeds from disturbed innervation, or circulation of the part, as, for example, from varicose veins, a wound or injury to a limb, or the presence of debility or irritant causes. In the majority of cases it is a manifestation of a nerve irritability which has its origin in constitutional debility. In one series of cases nutritive debility from deficiency or improper food is evidently the predisposing cause, as in the case of infants which have been deprived of their natural food. Allied with cases such as these are the examples of nervous and elderly persons in whom nutritive waste is more active than nutritive supply; while in a third series of cases, and these perhaps are the most numerous, the cause is referrible to mal-assimilation of the digestive organs."

Eczema has been called a selective inflammation, owing to the manner in which the elementary lesions prefer the orifices of gland-ducts, hairfollicles, &c., as the most vascular points. The late Dr. A. B. Buchanan§ stated that the lesion of eczema is at the commencement a localised macule, eczema erythematodes, the macule passes into a papule, eczema papulatum, the papule into a vesicle, eczema vesiculosum, the vesicle on giving way into an excoriation, eczema rubrum, or into a pustule, eczema impetignodes. If the skin becomes infiltrated while the secretion, if there has been any, dries up, lichen proper is, we are informed, produced, and the whole process ends in desquamation, eczema squamosum. "Most of these processes may be assumed from the beginning, or they may follow one another with a regularity more or less complete. They represent ideal stages, but at any of these stages the disease may be arrested, and may persist so as to come to express not stages only, but varieties. The first two are dry eruptions,

^{*} Journal of Cutaneous Medicine. No. viii., p. 345.

^{† &}quot;Principles of Surgery." p. 64.

[#] The Practitioner. No. xiv.

[§] Edinburgh Medical Journal. January, 1865.

The next four are moist, eczema humidum. eczema siccum. last two are again dry, with the exception of lichen-agrius, which is a hybrid, or transitional form." Buchanan, in his first variety, includes the disease called erythema-chronicum, an affection usually circumscribed, beginning at a point and slowly extending peripherically, accompanied with symptoms of redness, itching, and slight desquamation. In his eczema papulatum, or lichen simplex, we have a chronic, dry, papular eruption, more or less diffuse; when eczema passes this stage into the moist form, it is called eczema vesiculosum, and on rupture of the vesicles eczema rubrum, or madidans, being then a purely serous weeping eruption. "The lesion in the one case is a vesicle formed in connexion with some local peculiarity in the anatomy of the cutis; in the other it is an excoriation. Finally, in eczema humidum the epidermis is scarcely less liable to become infiltrated than in eczema siccum; in which case the epidermis frequently becomes fissured, exuding an eczematous secretion (the eczema-féndille of Devergie, the eczema fissum of Wilson, eczema rimosum of M'Call Anderson). This condition may pass into lichen exudations, which is an advanced stage of lichen simplex. Finally, an eczema squamosum is the last stage of an eczema, whatever its form may have been, and is a desquamation on the surface of an epidermis more or less thickened by infiltration." This last state-viz., sub-cutaneous infiltration—is probably due in a great measure at least to nerve irritation; for, according to Bernard, the cerebro-spinal nerves cause dilatation of the capillaries; the sympathetic, on the other hand, have an opposite influence, and if these two functions are not equally balanced, transudation may take place. The cells which in health only imbibe what is necessary for the nourishment of the tissues, also partly elaborate this exudation.

Mr. Erasmus Wilson acknowledges six varieties of eczema, which are as follows: -Ec. erythematosus, Ec. papulatum, Ec. vesiculosum, Ec. ichorosum, Ec. pustulosum, and Ec. squamosum. These varieties are founded on the predominance in the eruption of simple hyperæmia, of exudation, or of desquamation. Mr. Milton thinks that the different appearances of eczema are due to the stage of the disease, health, and constitution of the patient. "I consider," he says, "the essence of eczema the test of its nature to be a weeping surface, and I consider a true weeping surface is never produced from an eruption of vesicles or pustules. . . . Pustules, however, may complicate it; they do not necessarily form any part of the process." I also agree with Mr. Milton that we should include under the name ulcerated eczema "an obstinate affection attacking the leg and running into ulceration, a complaint generally seen in persons of middle age and advanced life." The ulcer sometimes occurs in the centre of a patch of eczema; if on the lower extremity there is usually a varicose condition of the superficial veins.

Acne is like eczema in its selective nature. Mr. Wilson believes that acne rosacea is an eczematous inflammation; and Hebra states that accumulated sebaceous matter often sets up an inflammation of the follicles, which would naturally be called *folliculitis*, but is generally termed acne. This disease, like eczema, is generally due to debility usually assimilative,

the nose being the common seat of the complaint, which, in chronic cases, is greatly enlarged owing to the growth of new tissue. It is frequently observed in the case of inveterate drinkers. In these persons dyspepsia is a common complaint, due, it is said, to obliteration to a great extent of the follicles of the mucous membrane of the stomach, owing to a species of subacute inflammation which gives rise to an abnormal growth of connective tissue in the coats of that organ.*

I have had a short time since an interesting case of acne under treatment in the person of a gentlemen aged twenty-four, which was evidently due to debility. He suffered from a severe cough for a long time that resisted all methods of treatment. My patient had follicular disease of the pharynx, with considerable bronchial irritation and agitated heart's action. Under the use of appropriate remedies he recovered. This case is interesting as showing an inflammation of the follicles of the skin of face and mucous membrane of pharynx.

When an eczema is tending towards "cure," furunculi frequently appear, especially around the diseased part. Now bearing in mind the selective nature of eczema in attacking gland ducts and other very vascular spots, M. Dénuce's theory comes in here appropriately, who looks on furuncle as a gangrenous inflammation, the so-called "core" being a dead gland. This gentleman thinks that whenever there is imperfect nutrition, furunculoid disease may arise.

Trosseau† has left it on record that old people who are asthmatic exhibit in their youth eruptions of an eczematous nature. "Indeed," he says, "nothing is more common than to find herpetic, rheumatic, gouty, and hæmorrhoidal affections transform themselves into asthma. . . . Thus eczematous eruptions, rheumatism, and gout are complaints which may be replaced by asthma and replace it in turn."

By some dermatologists prurigo is considered to be a variety of eczema. Dr. M'Call Anderson; informs us that prurigo is merely a variety of lichen, and consequently of eczema, "the papules being identical with those of lichen, the black crusts being produced by scratching." No doubt an eczema is frequently called forth due to irritation, especially in *prurigo senilis*, or phthiriasis; but most writers are now agreed that true prurigo is a neurosis, which fact I have endeavoured to prove elsewhere.

In such cases as the above the urine should always be tested, as it often furnishes a valuable hint as regards treatment. In conclusion, it may be necessary to say a few words on eczema-mercuriale, a disease I may say now

^{*} On this point Dr. Lees states that "by the prolonged use of alcoholic drinks, the stomach becomes after a variable time very seriously damaged from the chronic catarrh which is excited. The mucous membrane is coated with a tenacious mucus that excites unhealthy fermentation in the food, and the structure of this membrane is also considerably altered, for there occurs a great increase of the connective tissue, which by its contraction obstructs and destroys the secreting follicles and their lining cells. In consequence of these serious changes very little gastric juice is poured out

in response to the demand made by the food, while in this, by the mucus coating of the stomach, unhealthy fermentations are excited, and hence there is produced much gas with various acids, such as butryc acetic, &c."

^{+ &}quot;Clinical Medicine." Part iii., p. 645.

^{‡ &}quot; On Eczema." p. 20.

extinct. This form of eczema differs in some particulars from the variety called rubrum. Dr. Alley called it Hydrargyri, describing three species as mitis, febrilis, and maligna. The affection under notice was due to the excessive use of mercury administered for the cure of syphilis. Dr. Moriarty assigns to opium the cause of the eruption, which drug is usually given with the various preparations of mercury. A case has been recorded in which this form of eczema was reproduced by "one grain of opium." On this point, as recently mentioned by Dr. Frank Smith, Trousseau thinks that the exanthem following the use of opium is due to that drug being eliminated by the sweat glands, and in this process it acts as an irritant, producing an eruption on the skin.—Dr. H. S. Purdon in Medical Mirror, April, 1870.

Addison's Disease.—In the following notice we intend to glance briefly at a few of the principal views entertained regarding the pathology and skin changes observed in Addison's disease. Dr. Hayden (Dublin Quarterly Journal, February, 1865), says that "the pigmentation of the skin in Addison's disease results probably from either arrest of the process of molecular disintegration of the coloured cells of the cuticle, or from excessive destruction of the red blood corpuscles and consequent abnormal deposit of the escaped colouring matter, or pure hæmatin in the rete mucosum in its passage to the outer surface of the cuticle, whence it is to be discharged from the body." Anæmia, Mr. E. Wilson believes is a special feature, and the usual cause of pigment changes, giving rise as a secondary result to debility of the nervous powers. According to Dr. Laycock, an excessive deposit of pigment is brought about by imperfect oxidation; the carbon is not burnt off as carbonic acid, owing to imperfect elimination; but in the words of Brown-Séquard,* when the circulation of the blood is interrupted by vaso-motor spasm, nervous force can be transformed into chemical force, as in the salivary glands. An irritation of the nerves of these organs will, for a time after the stoppage of the circulation, produce a secretion of saliva. With these preliminary remarks we shall now proceed to the consideration of lentigo and Addison's disease. The former, often improperly called "sunburn," is a deposit of pigment in the rete mucosum, often congenital. M. Jeanin considers that this affection is the same as chloasma, which disease may be correctly divided into non-parasitic and parasitic varieties; the former being common in pregnant females, disappearing after their confinement. Sometimes it persists, and is more apparent at the catamenial periods. It may, therefore, be taken for granted, as we shall endeavour hereafter to prove, that the deposition of pigment depends upon the influence of the ganglionic nerves, and in Addison's disease it is that portion of this system, called the solar plexus, which is involved, if it be not the sympathetic system, which presides over organic life, and, consequently, nutrition of the tissues, how can we account for the sudden increase of pigment at puberty in the scrotum and perinæum, or during pregnancy in the areola surrounding the nipple, or the absence of pigment in canities, as in the

^{*} Lectures on Functional Nervous Affections.

well-known case of Marie Antoinette, whose hair became grey from grief?* Now, in Addison's disease, the principal symptoms may be said to be feebleness, gradual bronzing of the skin, inveterate vomiting, pain over region of stomach, and loss of appetite; to which may be added, according to Tanner, t indications of disturbed cerebral circulation, and, after an average duration of eighteen months, death from extreme anæmia and exhaustion. The bronzing, not as commonly said, due to disease of the supra-renal capsules; but, according to Damon! and Jaccoud, § to disease of the solar-plexus, the great centre of the sympathetic system. Now, there may be, firstly, bronzing with lesion of the supra-renal capsules; secondly, bronzing without lesion of the supra-renal capsules; and thirdly, lesion of the supra-renal capsules without bronzing, at least such are the results arrived at by Jaccoud, who has examined 127 cases of the first division, 17 of the second, and 58 of the third; from these facts Damon considers that "these series of phenomena of which Addison's disease forms but a part, may be regarded as symptomatic only of some functional or organic disturbance of the ganglionic nervous system, especially of that portion denominated the semi-lunar ganglion, or solar plexus, that this disturbance may have its origin in the nervous centres of these ganglia, or in the organs in immediate connection with them, and that this portion of the nervous system being the regulator of nutrition or organic life, and of the cutaneous secretions and excretions, becomes thereby the cause of disturbance of these functions when it is itself diseased." In the majority of cases contained in the first series, obstinate vomiting, we are informed, together with persistent lumbo-abdominal pain, constituted the prominent symptoms. To these may be added occasional headache, which is now known to be a neurosis of the sympathetic, vertigo, convulsions, and muscular twitching of face and forearms, delirium, coma, and palpitation. With regard to the latter, the experiments of Cyon and Ludwig|| on division of the splanchnics, the most important vaso-motor nerves in the body, which exercise the greatest control over the widest system of vessels, show that an influence is exerted upon the heart, apparent by the increase in the frequency of its beats. Discolouration of the skin, asthenia, and lumbar pains, are generally well marked. In Addison's disease, the supra-renal capsules are occasionally transformed into white albuminous masses, of a lardaceous consistence, for, as

^{*}We have met lately with a somewhat similar case, *i.e.*, Patrick Fullerton, aged 58, always a healthy man, but formerly of drunken and immoral habits, about ten years ago, during the religious revival of Ulster, became alarmed regarding his past conduct. One evening he was so much affected, that he remained out all night praying in a field, asking, as he informed us, for some sign by which he might know if his past iniquities had been pardoned. In the morning he discovered on the outer side of both fore-arms, midway between the elbow and wrist, a patch of white skin, the hairs upon which were perfectly white. The length of the said patches is about four inches, by two broad. He is naturally very hairy, the colour of which on the arms is black, although turning grey on the head.

[†] Index of Diseases. page 250.

[‡] On Structural Lesions of the Skin

[§] Sur les Maladies Bronzees, Gaz. Hebd., 1864.

[|] See "Retrospect of Medicine." New Sydenham Society. 1869. Pp. 99 and 17.

Dr. Eade* has informed us, "the partial removal of nerve-force is to allow the parts supplied to take on a lower form of vital action, and the degeneration will, of course, vary with the cause of the deprival, with its intensity and seat, as well as with the constitution of the individual. Ordinary complete removal of motor or sensitive nerve influence, of course produces ordinary paralysis; but removal of nutritive nerve influence produces other and distinct effects." Sometimes the branches of the semi-lunar ganglia are united; thus "changes in the condition of these nervous centres, from whatever cause, may implicate one or more of the organs with which they are connected." No doubt the ganglia may become affected by reflex action from a remote or near organ; but, as is well known, the supra-renal capsules are merely embryonic structures, and of little use, as their occasional absence proves. Addison's disease and Grave's disease are like each other in many particulars, both being affections of the sympathetic. The latter complaint bears a resemblance to the former in one or two particulars, our information being derived from "Trousseau's Clinical Medicine." For instance, the exophthalmos most marked at the menstrual periods, and by aid of the ophthalmoscope the retinæ were observed to be of a bright red colour from injection of the vessels; also, "on each side of the optic papilla, pigment was deposited in semilunar masses, almost black in hue." In Grave's disease, like Addison's, there is marked difficulty of breathing; the patients are likewise generally anemic: when they are females, chlorosis, a disease of the sympathetic system, according to Dr. Hammond, is usually present. Thus we see that disease of the supra-renal capsules in Addison's disease, and of the thyroid gland in Grave's disease, are merely symptoms in these neurosis of the sympathetic.

Oysters," Oysters," observes M. Favrot, in 'La France Médicale,' "were considered by the Romans a delicious article of food, Cibus nobilissimus, and are still highly esteemed by epicures; they supply, says M. Réveillé-Parise, the first gastric enjoyment allowable to delicate stomachs and to the convalescent. Oysters are a light and wholesome kind of food; they stimulate without surfeiting the appetite, and carry with them their natural condiment. Their flesh is readily digested, and is exceedingly nutritious, retaining after the destruction of the muscular fibre a certain amount of oil, which forms a sort of emulsion with the animal mucilage." The average consumption of oysters in Paris, which is close upon a hundred millions annually, may give some idea of the importance of this article of nutriment. M. Favrot studies separately the white and the green oysters. The colour of the latter, which are much valued by epicures, is due to a peculiar organic matter, and not, as some writers have alleged, to the presence of salts of iron or copper. The greenish hue is produced by certain local circumstances, and by the nature of the beds established at Marennes and La Tremblade. The oysters dredged on the coasts of Gascony, Saintonge, Poitou, Brittany, Normandy, Spain, or England, are white. With regard to the latter, we may, however, remark that certain oysters—those,

^{*} British Medical Journal. March 13th, 1869.

^{† &}quot;Lectures on Clinical Medicine." Bazires' Edition. Part III., p. 54.

for instance, caught in Falmouth river—are indebted for their greenish tinge to the copper present in the soil. These mollusca are, of course, unwholesome; but when deposited for six months in the oyster-beds of Marennes or La Tremblade, they spontaneously eliminate the copper and become edible. In M. Favrot's opinion, the metal is not always entirely got rid of; and if the taste is astringent, and the vinegar or lemon juice poured over the mollusca turns green, the presence of copper may be suspected, and the oyster should be rejected. The exhibition of oysters in disease or in convalescence has long been an habitual practice. Amongst those who prescribed them with most success, M. Favrot mentions Dr. Sainte-Marie, of Lyons. This gentleman recommended them with much benefit in cancerous affections of the digestive tube, in which no other sort of food is tolerated. M. Sainte-Marie opined that no description of nutriment was more readily assimilated; and he found oysters so useful in various descriptions of consumption, that he was in the habit of exhibiting them, and often with great advantage, in pulmonary tuberculosis, as a medicine for which no adequate substitute can be found.—Medical Circular.

THE OIL OF YELLOW SANDAL-WOOD.—We extract the following notice from The Practitioner, September, 1869:-" A surgeon writes to us from Glasgow as follows:—'Has the above remedy any virtues? In some of my cases it has failed, and several of my confrères have informed me that it has done likewise with them. The names of the gentlemen recommending it are well known to the profession as honest workers, but may they not be enthusiasts? As far as I can find, Dr. Thomas B. Henderson, of Glasgow, introduced this oil in a paper in the Glasgow Medical Journal, April, 1865, and informs us that in India the powder of sandal-wood is given in milk for gonorrhea; of the oil, the dose he recommends is 20 to 40 minims, with some aromatic. Next we have Dr. H. S. Purdon, of Belfast, writing on the oil of yellow sandal-wood, Medical Mirror, September, 1866, who differs from Dr. Henderson in one or two particulars, but recommends it combined with oil of cubebs. The next writer is Mr. Berkeley Hill, of London, British Medical Journal, July 6, 1867, who enters into more details, and reports nineteen cases of various duration, but on the whole thinks well of the remedy given with liquor potassæ. And lastly we have an article from Dr. H. W. Beach in the Boston Medical and Surgical Journal, November, 1868, who informs us that in ordinary cases five days are sufficient for cure, and it is to be recommended in gleet. This gentleman relates over 100 cases. He has also tried the white and red oils, but they are not so effective as the yellow, the best preparation of which is imported from Bombay. Dr. Beach gives from twenty drops upwards on lump-sugar. On the above remarks I offer no comments. Can any of your readers record their experience and enlighten me?" But Dr. H. S. Purdon protests that he has never regarded yellow sandal-wood oil as an infallible remedy, although it frequently succeeds better than copaibæ, and never causes urticaria. An extract from the original article is appended: "Remarks on the Oil of Yellow Sandal-Wood in the Treatment of Gonorrhea, with cases. By Henry S. Purdon, M.D.-Having for some time used the oil of yellow sandal-wood in the treatment of

gonorrhæa, I take the liberty of laying the following observations before the profession. We are indebted to Dr. Thomas Henderson, of Glasgow, for introducing to our notice during the summer of last year this oil, at present used extensively as a perfume. The oil is obtained by distillation from the wood of the tree Syrium myrtifolium, a native of the East Indies, one pound of the wood yielding about two drachms of oil. The dose being ten to thirty drops diluted with rectified spirit, but as it is liable to sicken when thus administered, I now combine it with various other remedies as hereafter mentioned. I have tried this remedy rather extensively in private practice, as its price renders it too expensive for either hospital or dispensary use. The following facts differ slightly from Dr. Henderson's conclusions:—

"'Dr. Henderson states that the oil of yellow sandal-wood acts as a stomachic medicine, occasioning little nausea."

"' Has slightly any smell."

- "'In many cases I have had to discontinue its use, on account of the nausea it occasioned.'
- "'The odour of this oil is extremely powerful, remaining on the breath, hands, &c., even after being frequently washed. It is also evident in the urine.'

The oil of yellow sandal-wood may be used in any stage of gonorrhea."—

Medical Mirror, September, 1866.

Sulphurous Acid in Syphilitic Ulceration of the Throat.—Following in the footsteps of Dr. Dewar, Dr. H. S. Purdon has been trying the value of sulphurous acid as a therapeutic agent. The special application of it recorded by him is to the class of affections above named. One case is given in illustration of the value of the acid. A gentleman had been under treatment by the iodide and bi-chloride of mercury, gargles of chlorate of potass, &c., and opium for more than eight weeks. Results unsatisfactory. Dr. Purdon then applied the sulphurous acid in the form of spray to the ulcerated surface. It was applied three times a day, and in three weeks the throat was quite well. (See British Medical Journal, May 9th).—The Practitioner, July, 1868.

THEIN AND CAFFEIN.—The alkaloids of tea and coffee have recently been experimented on by Mr. Leven, who has found that the latter is twice as strong as the former. He gives the following summary of its effects derived from experiments on animals:—1st. It determines convulsive movements in the limbs, in this respect differing from Caffein. 2nd. Both alkaloids directly excite the heart and the respiration, and increase the arterial tension. 3rd. In exciting the circulation they stimulate the central nervous system, the brain and cord, but they do not destroy the properties of these centres. 4th. The tetanic state produced by them is by the excitation of the cord. 5th. They do not interfere with the properties of muscles.

Valuable Preparation of Glycerine.—The Philadelphia Journal of Pharmacy contains a formula for a preparation which is likely to prove valuable for external use. Four parts, by weight, of yolk of egg are to be rubbed in a mortar with five parts of glycerine. The compound has the

consistence of honey, and is unctuous like fatty substances, over which it has the advantage of being easily removed by water. It is unalterable, a specimen having lain exposed to the air for three years unchanged. Applied to the skin it forms a varnish which effectually prevents the action of air. These properties render it serviceable for broken surfaces of all kinds, particularly erysipelas and sore nipples, and for cutaneous affections, of which it allays the itching.

VACCINATION.—Dr. E. R. Palmer contributes to the March number of the American Practitioner an excellent article on the "Vaccination Question," concerning chiefly the following points:-"Does the vaccine virus deteriorate by passing successively through a large number of human beings? Does the protective power of vaccination 'run out,' and is revaccination ever useful? Can constitutional diseases or diatheses be transmitted from person to person by the use of vaccine lymph from the vesicle of a person labouring under such disorders? Is there greater protection from multiple puncture than from single?" The first and third of these queries are answered in the negative; the second and fourth in the affirmative. As regards the transmissibility of syphilis, it seems to us that while "vaccine lymph" can communicate nothing but cow-pox, it has been clearly enough proven that the blood of a syphilitic patient may convey the venereal infection, to justify the inference that an admixture of blood, or of pus, with the vaccine lymph, may render it a vehicle of contagion. In connection with the question of re-vaccination, there is an argument to be adduced which is not usually sufficiently dwelt on by writers, but which, although not of a strictly scientific nature, may be found to carry some practical weight with the public. It is this: we are warranted in assuming that vaccination, while its efficacy lasts, protects against its own recurrence; in other words, that the very fact of re-vaccination "taking" is a proof that the immunity from small-pox, secured by previous operations, is lost. Hence, we may reasonably assure our patients that if the re-vaccination be not needed, it will cause no inconvenience, while the temporary annoyance of a "sore arm" will demonstrate the necessity of renewed protection. The duration of this protection varies so greatly in different individuals, that it is impossible to fix stated periods for its renewal. There can be no doubt that some persons retain through life the immunity procured by a single vaccination in infancy, while others are found susceptible to repeated revaccinations at brief intervals. The writer has frequently vaccinated himself during the last twenty years without result, permanent protection having seemingly followed a successful (second) operation performed when he was twelve years old; while in a patient recently under his observation who had already three well marked vaccinal scars, the last of which was said to date less than five years back, a fourth inoculation "took beautifully."

LIQUEUR DE VILLATE.—M. Nélaton employs the following modification of the liqueur de Vilatte as an injection to be thrown into the fistulous tracts connected with carious bone, &c.:—Acetic acid, 100 parts; sulphate of copper and sulphate of zinc, of each 10 parts; acetate of lead, 5 parts. There is a considerable precipitate, so that the solution requires shaking before employing it.—Union Med., May 31.

TREATMENT OF ONYCHIA.—The disease of which M. de Moerloose, of Ghent, effects a cure in a few days by the application of nitrate of lead is not that which is popularly termed the "growth of the nail into the flesh." but the fungous, ichorous, unhealthy ulcer, occurring especially in children at the root of the nails, which fall away, leaving a sore with swelled, jagged edges, causing a deformation of the finger or toe, and occasionally requiring amputation. "Parents," says M. de Moerloose, "frequently convey their children to the hospital requesting me to cut off the diseased finger. I have never consented to do, and I may add that I have always succeeded in effecting a rapid cure. A week or ten days in general, or at the farthest three or four weeks, have always been sufficient for the purpose even under the most unfavourable circumstances. The remedy I resort to is the application, after the excision of any irregular horny excrescences, of powdered nitrate of lead. The wound should be dressed once a day only: the pain promptly subsides, the swelling soon decreases, the secretion resumes a healthy character, and, in the course of five or six days, the sore is often thoroughly cleansed. Mr. Wardrop, who refers the disease to syphilis, recommends mercury to be employed so as to affect the gums, in about a fortnight; but although the affection may occasionally in the adult be traced to this cause, it is frequently met with in hospitals for children, where it appears more obviously connected with a scrofulous condition of the system, and much more rapidly yields to the very simple treatment above described than to any other medication.

EXTERNAL REMEDIES.—In the application of external remedies to diseased parts, it especially behoves the surgeon to take into consideration the degree of vitality possessed by such parts, and to graduate their strength accordingly. Mr. Henry Earle has published an interesting case in illustration of this principle. The arm of a person became paralytic in consesequence of an injury of the axillary plexus, from a fracture of the collar bone; upon keeping the limb for nearly half-an-hour in a tub of warm grains, which was previously ascertained by the other hand not to be too hot, the whole hand became blistered in a most alarming manner; and although sloughs formed at the extremities of the fingers and underneath the nails, a considerable degree of inflammation subsequently spread in the course of the absorbents, and matter formed in the axilla, which was soon absorbed, and the inflammation assuaged. Whence it follows that a limb deprived of its usual supply of nervous energy cannot sustain without injury an elevation of temperature, which would not be in the least prejudicial to a healthy member. Mr. Earle supports this conclusion by the relation of another case, in which the ulnar nerve had been divided for the cure of a painful affection of the arm, the consequence of which operation was that the patient was incapable of washing in water at a temperature that was quite harmless to every duly vitalized part, without suffering from vesication and sloughs. Thus also in the application of sinapisms there will be a risk of inducing gangrene in the part, should their duration be carried beyond the powers of reaction, as long as the patient is capable of feeling the intense pain we have a criterion by which to judge, but in cases of stupor the greatest circumspection should be used.—Dr. Paris.

THE ART OF PRESCRIBING.—The skill of the physician is shown by the administration of the proper remedy, in the proper quantity, at the proper time. A druggist's apprentice can tell what agents will purge, vomit, or sweat, but a man must be practically conversant with disease to be able rightly to apply his therapeutical resources to the exigencies of any particular case. Instead of introducing medicines into the system by the stomach, it is often more advisable to do so by the rectum or by the skin, or by the lungs, or by injection into the areolar tissue. Absorption takes place from the rectum as speedily and surely as from the stomach; and hence purgatives, emetics, narcotics, tonics, and nutrients may be admirably administered as enemata. The skin offers a mechanical impediment to absorption, but still poultices and fomentations, plasters, liniments and ointments. and medicated vapour or water baths, are valuable remedies. If the cuticle be removed by a blister, and the medicine applied to the denuded dermis in its pure state, or incorporated with lard or mucilage, its action will be rapid. The system is quickly and thoroughly affected by the inhalation of medicated vapours, or of substances reduced to an impalpable powder. Subcutaneous injections must be employed with great caution; since by this plan none of the medicine is lost, neither is it altered or diluted by the contents of the stomach, as happens when drugs are taken by the mouth.— Dr. Tanner, in "Index of Diseases," p. 295.

Lipoma—Is constituted by a new formation of adipose tissue in a limited portion of the integument. The commencement of this change takes place in the elements of the mucous tissue in which there is hyperplasia, or excessive nutrition, in consequence of some local irritation. This excess in the nutritive process causes the rapid production of fatty cells, and of lobules around and between which the connective tissue and blood-vessels form envelopes and septa that gradually increase in size and thickness. Traumatism occasionally gives rise to these fatty tumors, and influences their growth. Lipomas also vary in size, prominence, and situation. Congenital lipomas are usually small, seldom prominent, and are of more frequent occurrence about the eyelids and scalp than elsewhere. Nævus lipomatodes is the name given to a variety of congenital lipoma. There is also a much rarer variety known as cystic or encysted lipoma of the skin. Sometimes the skin is raised or pushed forward by the lipoma and diminished in thickness until the tumor assumes the form of a pendulous mass or cutaneous polypus. Pendulous lipomas of the skin are generally of a lobulated appearance, and are attached to the integument by a slender pedicle of adipose tissue, which is continuous with the adipose layer of the derma. Occasionally the pedicle is composed entirely of connective tissue. Lipomas are of slow growth and indefinite duration. They are seldom painful, nor do they produce much inconvenience, except when they attain unusual dimensions. When situated on the eyelids, scalp, or face, they are unsightly, and should be removed by excision when they are situated in and beneath the skin. If, however, they form pendulous tumors of small dimensions or with slender pedicles, recourse may be had to ligation. Nothing is more simple than the treatment of these usually benign new formations in the skin. - Dr. Damon, in "Structural Lesions of the Skin."

NASTURTIUM OFFICINALE.—Surgeon-Major Wyatt, of the Coldstream Guards, writes at follows:—"The frequent correspondence which from time to time has appeared in the public papers with reference to the inadequate supply and adulteration of lime-juice supplied to the mercantile marine, coupled with the announcement of vessels arriving in the Thames after long voyages with severe cases of scurvy on board, all testify to the the accuracy of the complaints made on the subject, I would venture to claim for an oldfashioned, but not the less efficient vegetable alterative, a consideration which I think it not scarcely receives for the treatment of such cachetic diseases. I refer to the nasturtium officinale, or common water-cress, a very efficient preparation of which has been, at my suggestion, produced in the laboratory of Messrs. Savory & Barker, of New Bond Street. It is designated the 'liquour nasturtii,' and contains all the active properties of the plant in a very palatable form. Of course everybody is aware of the valuable anti-scorbutic properties of the cruciferæ generally, and of the peculiarly palatable relish of the fresh plant on the table, but independently of this well-established character, I do not think that its value is sufficiently appreciated as a vegetable alterative for that numerous class of cases of cachectic blood diseases which is so often to be observed amongst the poorer classes in densely crowded towns, and which morbid deterioration is probably due in a great degree to the deficiency of succulent vegetable element in their vicarious diet. I have, during several years past, been in the habit of employing the liquor nasturtii as a prophylatic in such conditions with the best results. I regret that no official preparation of the plant exists in the British Pharmacopæia, but in that of 1788, a preparation called 'succus antiscorbuticus' was to be found, and in the Parasian Codex there are two valuable preparations—the 'succus' and the 'syrup anti-scorbuticus,' the chief ingredients of which are water-cress, scurvy-grass, and buck-bean. The memorable campaign in the Crimea practically taught me and many others the incalculable value of even such snatches of vegetation as could be procured from the banks of the rivers; and well do I remember the appetizing sight of the little dishes of indigenous salad to be seen so often in the French camp, composed of a small species of water-cress, dandelion, and sorrel, while our men were feeding strictly upon the regulation food, and suffering in consequence. . . I cannot help noticing the remarkable peculiarity of the latent cumulative influence of the exciting causes of scurvy, which often is displayed in individuals whose constitutional powers were sufficiently vigorous to resist the appreciable development of the disease during the time that its seeds were sown by deprivation of the vegetable elementary constituents of food so necessary for the maintenance of healthy nutrition."—British Medical Journal.

FOOD FOR INFANTS.—Dr. H. Corson offers the following remarks. He says that medical men invariably give the same advice to mothers who consult them in relation to the proper mode of feeding children to be raised by hand. They all direct them to give the one-third milk and two-thirds water. The reason for adding the water is that the milk is too strong. "Thirty-two years ago it became necessary to have my own child reared by hand, and I then discovered how ignorant I had been in relation to the

quantity of food necessary for an infant, and was also enabled to observe the effects of an insufficient amount of food. Subsequent observation through many years have convinced me that there is not more than one woman in five, and perhaps not more than one in ten, who knows what amount of milk a child should have; nor is there one physician in very many who can tell the mother or nurse what quantity it would need in twenty-four hours. I have repeatedly asked mothers and nurses and physicians; it has been rarely that they have approximated the truth, and this because their attention had never been especially drawn to it. One would say a teacupful, another not quite so much, a third rather more, a fourth half-a-pint, and some even as high as a pint, though they rarely named so much; and then, on being asked if they put water with the milk, they invariably replied, one-half water or two-thirds water, and one-third milk. Now, scarcely any child of one month old will be satisfied with a pint daily, many will take a quart, the average is between them. I do not mean that to this quantity twice as much water should be added, thus making nearly three quarts of fluid, for no child could take so much in twenty-four hours. Suppose, then, that a child can only take three half-pints of fluid into its stomach in a day, and two half-pints of it are water, it will then only get eight ounces of milk when it needs twenty-four or thirty-two ounces daily. My plan is to direct as much milk as the child can take and as often as it wants it, but always of the temperature nearly of the mother's milk. In winter-time, or when milk is kept in a deep cave or in a spring house, I direct that as much boiling water be added to it as will bring it to that temperature. It takes but little water, and is more convenient than heating it over the fire. To a pint of cool milk two table-spoonfuls of boiling water should be added, the whole then sweetened. A healthy child of one month will take that much in twenty-four hours; some children will take more. Those children who have been nursed or fed by the spoon will sometimes wholly refuse to take the bottle in lieu of the breast, and the mother takes it for evidence that they do not like the cow's milk, and will therefore attempt to raise them on some of the many farinaceous articles recommended, and in this she will likely fail. A little perseverance will generally induce them to take the bottle, and when once used to it, so that they can steady it with their own hands, they will rarely take too much. I sincerely hope that our graduates will not hereafter go forth to practise believing that the proper substitute for the mother's milk is a mixture of two-thirds water and one-third of cow's milk; rather let them be instructed that the higher the organisation of the animal the more abundant will be the nutritive constituents of the milk; and as man is at the head of the animal creation, human milk is more highly organised than that of any other animal. If, then, you wished to use any other milk as a substitute for the mother's, instead of diluting it with water it would seem to be more appropriate to add to it some nutritive substance. Baron Liebig's soup is probably very good, for to five ounces of good milk he adds half-an-ounce of wheaten flour, half-an-ounce of malt flour, and seven grains and a-quarter of cream of tartar, dissolved in one ounce of water. This is to be put on a gentle fire, and when it begins to thicken it is removed from the fire, stirred

for five minutes, heated, stirred again until it becomes quite fluid, and finally made to boil; separate the bran by a sieve, and it is fit for use. But how inconvenient for the poor to procure these ingredients and prepare them for use. When milk cannot be procured farinaceous substances may be used. but milk is better. I feel that some physicians, who practise among the higher classes of society, will regard these observations as having no reference to their patients; it would be fortunate if it were so. Who has not seen the poor little emaciated child of rich parents dragged about in its little coach by the nurse, or lying on her lap on a cushion, as the large carriage rolled along to give it an airing by direction of the physician, whose precise directions had been to feed it every four hours, two-thirds water and one-third milk. Day after day, week after week, has he not visited it and prescribed (not for the starvation) but to improve its nutrition, to relieve its colics, to correct its sourness of stomach, to regulate its bowels, or, to sum up all in one common phrase, 'to build it up.' Did he succeed? No; under the impression that the child's stomach was weak, not able to take much food, the quantity was diminished, a little lime-water, mint-water, or some other 'corrective' added, and the little starving sufferer never ceasing its low, plaintive moan, gradually passed away for ever. Children who are fed on milk and water are sometimes saved by a habit which prevails among the poor, of giving it while the mother is eating small bits of bread or biscuit soaked in coffee, or with molasses or sugar on it. Thus, very soon the little thing becomes clamorous for it, and the mother, to keep it quiet, will soon give it a slice of bread to suck at. Children of a few months will sometimes thus be saved."—Half-yearly Compendium.

PATHOLOGY OF THE NERVOUS SYSTEM .- Dr. Laycock, Professor of the Practice of Medicine, Edinburgh, in a series of interesting papers on the "Pathology of the Nervous System," in the British Medical Journal, 1868, made the following remarks:- "My readers will remember that, in my first contribution, I stated—1st. That it was a fundamental fact of both philosophy and physiology, that, with every change in the mind or consciousness, there is a change of some kind in the constitution of the brain tissue: 2nd. That, although theories differed as to the mode in which the cerebral changes are effected, it was common to all theories that they are regulated by the laws of chemical affinity; and 3rd. That the elementary body termed phosphorus, being an important constituent of the tissue, had been fixed upon as the chief agent in the chemical changes. Starting from these facts and principles, the inquiry has led to some important practical conclusions. 1. Although phosphorus is an important and probably essential constituent of brain and nerve tissue, it is an equually important and essential constituent of all the tissues of at least all higher organisms, whether animal or vegetable: consequently, however beneficial the medicinal phosphorcompounds may be in certain diseases and defects of the nervous system, they will be equally useful in certain diseases and defects of the tissues in general. Now this conclusion at once clears away certain pathological fallacies, and enables us to establish certain therapeutical generalisations. For example, the abundant phosphates in the urine in certain diseases are derived as much from tissues generally as from brain tissue, and not

specially from the latter, as is often affirmed. Again, either a waste of phosphates in the tissues by disease or vice, or a defective dietetic supply, will affect the nutrition and functions of the nervous system or particular parts of it; so that the administration of the phosphates, either in diet or in medicine, is essential to the perfection and restoration, when defective, of all kinds of nutrition. And this is found to be so in practice. For example, in cases of highly cachectic tertiary syphilis, full doses (small ones will not do) of iodine and potassium in combination often restore healthy nutrition; but if the patient, when cured, be placed under such circumstances that there is rapid waste of the phosphates, as in great mental anxiety and excessive thought, and some exhausting diseases, then the tissues take on unhealthy nutrition again, and syphilis breaks out afresh. On the other hand, cases of syphilitic cachexia are sometimes found to be untouched by full doses of iodide of potassium alone (I have given it up to half a drachm); but, if the syrup of the phosphates be added, then beneficial results follow at once. The phosphate of lime, either pure or better as ivory-dust, is an excellent tonic in various forms of struma and phthisis, just as it is a tonic for unhealthy plants. Further, it is of practical importance to remember, in considering the therapeutics of the neuroses, that besides the grey and white matter which constitute the tissue proper of the nervous system, there are blood-vessels, lymphatics, and connective tissue, which may be primarily if not exclusively diseased in syphilitic, gouty, and other diathetic neuroses, and in hereditary brain diseases like insanity. 2. And this points to the fact that other constituents of living tissue are as necessary to healthy nutrition as phosphorus, or its analogue sulphur, so abundant in the albumen of the egg and in mussels. Such are the non-metallic bodies, chlorine, iodine, bromine; and the metallic, iron, calcium, potassium, magnesium. All these are as important, both pathologically and therapeutically, as the 'flesh-formers' and 'heat-producers' of the chemists. In rheumatic fever and some kinds of chronic rheumatism, sulphates are eliminated in excess, as well as the uric and lactic acids commonly noted. Certain fibrinous states of the blood, which favour rheumatic attacks, are in the same category. Hence the relations of phosphorus and of the heat-producers and flesh-formers to these other elementary bodies must be examined, if we would accurately observe the results of the influence of the nervous system on nutrition of tissues—as, for example, in gouty diseases, rheumatic fever, dropsies, tuberculosis, and all blood-cachexiæ. Consequently—3. Although the physician can have no objection to the doctrine of the correlation of the physical forces as a basis of biology, it is plain that in the results of chemical affinity we have not merely motion (kinesis) to deal with, but motion and orderly arrangement (diathesis); and that it thus operates according to a law of evolution and differentiation in both inorganic and organic chemical compounds. Now, this law of evolution is the fundamental law of life and organisation; so that we, as physicians, have not to deal proximately with the correlation of the physical or kinetic forces, but with diathetic forces; and the correlations of consciousness are not directly with merely physical force, but with diathetic or vital forces, as manifested in evolutional series. And this conclusion places heat in its proper relation to

chemical affinity, as a conditioning force, and heat producers in their proper relations to the diathetisers, like phosphorus, sulphur, and iron, for which organic chemistry finds systematically no place. Hence the phosphorised fats of sperm-cells and nerve-tissue have an important relation to cell and brain-function in regard to the evolution of heat within the tissue. It is probable that cod-liver oil as an iodised fat owes it medicinal efficacy to a similar relation to the diathetisers in tissues generally. A knowledge of the relations of heat to vital changes is, therefore, one of the chief elements of a true nervous pathology. Many local affections, both in cerebro-spinal centres and in organs, whether functional or structural, owe their origin and their course to local morbid changes in temperature, either in excess or defect."

Animal Quinine.—Mr. Jabez Hogg, in his pamphlet on cataract, informs us that "the extraordinary rapidity with which the nutritive processes are carried on in the body is beautifully exemplified under certain conditions in the refracting media of the eyes. Dr. Bence Jones found that a small dose of lithium in the course of a few minutes passed through the circulation into every part of the body, even into those parts most distant from the central blood supply. The living eye gives the earliest indication of the presence of this remedy. When sulphate of quinine is administered like lithium and other substances it rapidly passes from the blood into the textures of the body. Within a quarter of an hour increased fluorescence is noticed in the nervous texture, in the aqueous humor, and in the lens. This observation led to the discovery that a substance resembling quinine is always present in the animal body. It is believed that this animal quinine is descended from albumen, and doubtless is an alkaline fluorescent substance of the utmost importance in the animal economy."

Syphilis as a Destroyer of the Nose.—The popular impression that syphilis is the most common destroyer of the nose I believe to be unfounded. That it is occasionally there can be no doubt, and the destruction occurs in different ways. Sometimes a secondary phagedenic ulcer will form on the alæ or tip of the nose, and end in the destruction of the cartilages of the alæ and the cartilagenous septum, with more or less of the integument; or strumo-syphilitic ulceration at a late period commences inside the nose on the membrane of the cartilagenous septum, soon extending to and destroying the cartilage itself with the adjacent soft parts, and finally extending even to the bones. This ulceration is of a lupoid character—the worst form of strumo-syphilitic disease, and the most unmanageable begins in the bones of the inside of the nose and their lining membrane, the bony septum, the nasal, ethmoid, and turbinated bones. They become dead, and are separated with horribly fetid discharge and much suffering, both local, constitutional, and mental. In such cases not unfrequently a perforation is formed from the nose through the hard palate into the mouth by ulceration of the soft and caries and necrosis of the bony tissues. This opening is no doubt an effort of nature to form a more ready exit for the discharge and any portions of loose bone. Through such a hole in the hard palate I have extracted large pieces of dead bone; on one occasion the greater part of the box of the ethmoid. Though this form of the disease has "its broken arch,

its ruined walls and portals foul," the integuments generally escape; but, even so, a sufficiently hideous and very characteristic feature remains—the nose quite flat, with a transverse depression across its centre, distorted, puckered, and with contracted but spread-out mis-shapen nostrils.—"The Restoration of a Lost Nose," by John Hamilton, F.R.C.S.I.

Chocolate versus Quinine.—In the *Medical and Surgical Reporter*, Philadelphia, July 11th, 1868, Dr. R. W. Parke, of Mobile, bears testimony to the power which chocolate has of disguising the taste of quinine. He advises the chewing of "chocolate drops" immediately after the dose. A better plan, we think, is to give the quinine in strong hot chocolate.

TREATMENT OF LUPUS ERYTHEMATOSUS.—The scales are to be removed by the application of strips of linen soaked in oil, and kept in position by a flannel roller. Then the diseased part may be rubbed with a good lather of potash soap on flannel. If this fail, strong liquor ammoniæ or liquor potassæ may be applied with a pencil of lint, or a solution of iodine in glycerine. R Iodinii, gr. xx.; glycerinii, 3 i.; potass. iodid, 3 ss.; or Rochard's ointment, which is composed of calomel, gr. xx.; iodine, gr. viii.; melted together with aid of gentle heat, and triturated with 3 ii. of conium ointment. Carbolic acid has been applied with varying success, sometimes effecting a brilliant cure. Arsenic, mercury, and cod-liver oil are generally without influence on the disease.—American Journal of Med. Science.

Psoriasis—Is a cutaneous disease, peculiar to itself, often hereditary, difficult to cure, relapses being of common occurrence. With this affection nearly all modern dermatologists include lepra, and which is considered to be only one of the stages in the progress of psoriasis. This disease is essentially a scaly complaint, and according to Dr. McCall Anderson, "is accompanied by little or no constitutional symptoms, appearing usually on the knees and elbows, in the form of thin, papery, silvery scales, accompanied in recent cases by slight inflammatory symptoms, manifested by heat of the affected surface, itching, &c. Psoriasis arises from various causes, as-1st, debility; 2nd, hereditary tendency; 3rd, plethora; 4th, syphilis; and 5th, alcoholism. On this latter point Dr. George Ross in his lectures on "Diseases of the Skin," states that a "gin-drinker's skin is usually pallid, dry, harsh, and dark. Two of the worst cases of psoriasis I have ever seen were in the persons of gin-drinkers." In the following remarks all reference to syphilis is omitted, as it does not enter into our present consideration. In its early stage, a patch of psoriasis is more or less congested, raised above the level of the surrounding skin, has no tendency to spread, especially by continuity of surface, and is of a dusky red colour, accompanied by a sensation of itching. In the chronic stage, white, laminated scales are prevalent. The rete mucosum and cuticle are the structures affected in the acute stage, the vitality of which are usually impaired, in the chronic stage the subcutaneous cellular tissue becomes infiltrated, giving to the part affected a thickened feel. The sudoriparous glands, which are situated in the middle and deeper structures of the corion are usually obstructed, healthy perspiration being thus prevented. When psoriasis has disappeared, the parts lately affected, present a darker colour than natural, owing to a deposition of pigment. Psoriasis frequently

attacks the nails, palms of the hands and soles of the feet, the skin being thickened and very hard to the touch. When the nails are affected they readily split, but the most common seats of this disease are the elbows, knees, and forehead, in the latter situation extending backwards amongst the hairs, frequently for a considerable distance. Romberg, in his work on "Diseases of the Nervous System," and under the head of "Neuroses of Sensibility," mentions that "washerwomen frequently complain of an annoying sensation of numbness in both hands and forearms, the motility is unimpaired, and this cutaneous anæsthesia is to be attributed to their occupation, arising from the effects of the ley, which also acts on the nutritive system, giving rise to the disease called psoriasis lavatricum." The primary lesion in psoriasis is a papule, which extends in a peripherical manner, numerous scales accumulating on the surface, accompanied in all cases by inflammatory symptoms of an acute congestive character; thus several patches are formed, which in their progress present various distinct characters, to which different names have been given, as psoriasis guttata (when the eruption is like drops of mortar), gyrata, circinata, &c. Bateman has remarked, that in Willan's three first species of lichen, the papular form is frequently lost, and that they "occasionally pass into psoriasis." This observation shows that Bateman was fully aware of what has been remarked by later writers, that psoriasis commences in a papular eruption. Psoriasis and lepra are easily recognised from other diseases of the skin; the only affections liable to be confounded, are pityriasis capitis, eczema siccum, squamous syphilis, and herpes circinatus. In some cases, occurring principally in females, the patients are very liable to catarrhal attacks.

BATHS FOR THE MILLION.—Mr. Ayrton, on Thursday evening, July 7th, in reply to Mr. Strutt's inquiry as to whether he proposed to offer any facilities to the public for bathing in the Serpentine, stated that there was a difficulty in carrying out the plan of setting aside some special place for this purpose. The subject would, however, be considered before next Session, and something with respect to it might, he hoped, be done. Everybody will share in this hope, for there is a strong suspicion that some of the lower middle classes are not quite so clean in their habits as they might be. If a return could be furnished to Parliament of the number of linendrapers' assistants who have anything but a hand-basin in which to perform their ablutions, it would, we fear, be a painful and instructive document. Indeed, it may safely be said that a very small per-centage of the inhabitants of London are ever washed at all. Some few are washed on Saturdays, but it is an awful truth that the vast majority from the cradle to the grave are never immersed in water. We not only revere the dust of our ancestors, but we also cherish the memory of their dirt, and even the ordinary hip bath, which is to be found in every educated person's room, is quite a modern invention. Some years ago, when the troops were encamped at Chobham, a young ensign complained that he had no means of washing in his tent. "Look at me, Sir," replied the general officer to whom he addressed his complaint; "I have not been in a bath since the year 1794;" and there is no doubt that the aged warrior spoke the truth. Our grandfathers

not only revelled in dirt, but thought cleanliness contemptible. The establishment of public baths and wash-houses, the first of which was opened in the neighbourhood of the London Docks, in 1844, has, no doubt, effected a great improvement in our national habits, but private baths and wash-houses are necessary before we shall become as a nation thoroughly cleansed of our impurities. The establishment of these, however, is a work of years, and, in the meantime, the Serpentine would, during Summer, be a considerable assistance to the great unwashed; unless, indeed, it is true, as stated, that the mud is simply to be covered with a coating of gravel, and that the latter will speedily sink into the former, in which case it will be necessary for those who have bathed in the Serpentine to take a second plunge into the lake in St. James's Park to get rid of the effects of their first ablution.—

Pall-Mall Gazette.

Notes on the Dermatophyte.—The part played by fungi in causing disease is daily becoming more clearly recognised. Few now deny the vegetable nature of many cutaneous diseases, but as may be expected there are still very various and conflicting opinions in our modern school of dermatology. For example, no less than four dogmas are held to be indisputable by their various supporters, which may be divided, as correctly remarked by a reviewer in a late number of the Glasgow Medical Journal, into-1st. Those who agree with Erasmus Wilson in denying altogether the parasitic nature of the so-called fungus, and, instead, hold the belief of a granular or phytiform degeneration. 2nd. Those who, like Hebra, consider that a parasite may occasionally be present, when it is an accidental complication. 3rd. Those who, with Tilbury Fox, believe that the cause of these diseases is the presence of a fungus, the differences observed in the appearances of each affection being due to the state of growth of the cryptogram, soil, and patient's constitution. 4th. Those who, with M'Call Anderson, think that soil and constitution have little influence upon the growth and development of the parasite. Every one has noticed the low forms of vegetable growths to be found on old bread, cheese, ink, books, &c. This fungus is known as the Penicillium Glaucum, and has certain analogies to another, the Botrytes Bassiania, which frequently attacks the silk-worm, producing the disease called Muscardine. The most favourable condition for the growth of these, as of all other fungi, is the presence of damp. Another circumstance favourable to their development is the presence of a certain quantity of oxygen, which they readily absorb. giving off carbonic acid. It is a fact worthy of note that the vegetable moulds assume various forms according to the localities and circumstances in which they are placed. For example, Dr. Tilbury Fox placed a hair taken from a patch of tinea circinata in sugar and water, when it was observed that after a few days the spores became larger and linked together after the manner of the achorion mycelium (favus), and he further informs us that "favus has been known to spring up in a patch of tinea circinata, and a clue to a proper explanation is afforded by the fact, that the fungus takes on an active state of growth and sprouting from a favus cup. We must look for an explanation of the differences between the varieties of tinea, not so much in differences of fungus as of soil and seat upon which

they grow." Any one engaged in a large cutaneous practice must have observed, especially on the body, the occasional occurrence of tinea circinata and favus. I have met with three such cases during the last two years, the notes of which have been published. I may, however, briefly mention that in one case, that of a boy aged 7 years, admitted February 8th, 1868, tinea circinata existed on the neck and chin. In the centre of one of the rings, which were all fading, there were several well-marked favus cups. On the chin the disease had assumed a tubercular character: the affection on this part, if covered with hair, would probably have been called sycosis parasitica. Many cases similar to the above have been recorded, and we must consider the occurrence together of the two diseases to be more than a mere coincidence. Mr. Law, Professor of Veterinary Anatomy in Cornelf University, when residing in Belfast, experimented upon some rabbits with the fungus taken from an apple upon which the achorion had been transplanted. Mr. Law at the same time was experimenting on the inoculation of rabbits with tubercle, and, strange to say, it was only on two of those which had become tuberculous that the fungus flourished. course many failures took place before this desirable end was accomplished. The part where they had been inoculated, the inside of the ear, became, after some time, from one week to three, red and scaly, and took on the appearances of tinea circinata. Suffice it to say, that on microscopic examination, some of the scales and hair taken therefrom, first treated with liquor potassæ and then with ether, showed numerous sporules. By this simple experiment, we can easily account for the occurrence of favus in mice and cats. The mice during their rambles come in contact with a fungus, most probably the Penicillium Glaucum, growing on old wood, for instance. In the natural state of affairs, they are caught by the cat, which then becomes attacked in turn, always on the forepaws and face, owing to the manner in which they kill their prey. I have seen a little girl with favus on the arm, owing to nursing a cat similarly affected. Dr. Purser, of Dublin, has published a case of tinea circinata occurring in a female, who contracted the disease from a cat the subject of favus on one of her paws. No doubt the ordinary forms of "ringworm"—viz., tinea circinata, tonsurans, and sycosis are due to the same parasite, the trichophyton tonsurans. This fact is conceded by all parties, and Dr. M'Call Anderson groups these diseases together in his last edition on Parasitic Diseases under the name tinea trichophytina. If we take a step further and acknowledge the achorion to be a more matured form of the trichophyton, growing on a more favourable soil, I think that we will not be far from the truth. The researches of Tulasne and De Barry, quoted by Dr. Tilbury Fox, have "contributed to the establishment of the doctrine of polymorphism, which implies that one fungus may pass through a cycle of development, and in its different stages give rise to many different forms, originally regarded as distinct species."

THE HEALING OF WOUNDS BY TRANSPLANTATION.—From the Lancet of July 9th, we perceive that Mr. George Pollock is conducting a series of experiments in St. George's Hospital, with a view to determine the possibility of hastening the healing over of ulcerated surfaces, especially such as result

from severe burns, by the transplantation of healthy epidermis to the denuded part. In one case of an extensive ulcerated surface resulting from a burn, successive portions of skin have been from time to time transplanted with the best results; the portions of skin removed each time are extremely minute; upon the latter the success of the operation depends.

IODOFORM.—In three cases of scabies where the patients object to sulphur in any form, Professor Tanturri employs frictions with storax, and an obstinate case of prurigo he is treating with ointment of iodoform. This compound, first brought prominently into notice by Bouchardat, is now employed extensively not only for glandular enlargements, but also, owing to its anæsthetic properties, in skin diseases accompanied with intense pruritus; its odour is much more agreeable than that of chloroform, resembling that of saffron. Moretin and Humbert recommend it for internal use as possessing all the advantages of iodine, of which it contains 90 per cent., without any of its inconveniences. It exercises upon the sphincters a local anæsthetic effect so powerful that defecation is sometimes performed unconsciously after its use; it therefore forms an admirable suppository in cases of tenesmus, hæmorrhoids, &c. Moûtre's formula is-iodoform, powdered, gr. xx.; cocoa butter, 3j.; melt and mix for six suppositories. frictions the ointment is used in the strength of 3 j. to the ounce of simple ointment.—Medical Times and Gazette.

CUTANEOUS PRURITUS OF THE OUTER MEATUS OF THE EAR. -Dr. Gruber by the name cutaneous pruritus indicates an intolerable itching of the external meatus auditorium, which occurs in paroxysms, often periodical, but usually varying in duration and frequency. It is entirely unconnected with the itching alluded to by Hebra as the result of eczema of the same locality. The cutaneous pruritus of the ear is attended by no other objective or subjective primary symptom save the itching. It occurs for the most part in persons of middle age, especially those labouring under some disturbance of the circulation. As palliatives for the itching, Dr. G. advises soothing watery or oily preparations to be dropped into the ear. For radical cure he employs a solution of nitrate of silver (6 to 8 grs. to the ounce of distilled water) with which the parts affected are to be frequently pencilled until the paroxysms of itching no longer recur. There are no doubt cases in which an internal depurative treatment will be found to expedite the cure.— Centralblatt f. d. Medicin. Wissenschaften, March 20, 1869, from Allgem. Wiem. Med. Zeitung, 1868, 52.

Anosmia; Cases illustrating the Physiology and Pathology of the Sense of Smell.—This is the title of a paper by Dr. William Ogle, read before the Royal Med. and Chir. Society Jan. 25th, 1870. The author relates three cases which have fallen under his observation, in which total loss of smell was produced by a blow on the head, and he attributes the anosmia to rupture of the olfactory nerves, and points out how these nerves are especially liable to injury from blows on the occiput, which was the part struck in each case. Each patient complained not only of loss of smell, but also of loss of taste. True taste, however, was really unimpaired; what was lost was the power of recognizing "flavours," which are sensations compounded of smell and taste. These cases afford an opportunity of

drawing a clear line between taste and smell, and show that taste is limited to the perception of acid, salt, sweet, and bitter. These simple tastes compounded with smells form "flavours." Various cases are then considered which seem in contradiction with this opinion-namely, cases in which smell is apparently lost, and yet the perception of flavours remains. These cases are explained, and the contradiction shown to be only apparent. second group of cases follows, in which anosmia resulted from lesion of the nerve centres. It is shown that anosmia is a frequent accompaniment of aphasia, and it is argued that the explanation of this is to be found in the proximity of the so-called external root of the olfactory nerve to the part of the brain usually affected in aphasia, a proximity which renders the two parts very liable to be involved in one common lesion. The relative importance of the external and of the other roots of the olfactory bulb is considered, and it is held that the latter have little, if anything, to do in the perception of olfactory sensations. Lastly, a case of anosmia, recorded many years ago by Dr. Hutchinson, is discussed at length. A negro began, in his twelfth year, to lose his colour, and, in course of time, became perfectly white. The loss of colour was accompanied by loss of the sense of smell, almost, if not quite, complete. This seems to have been hitherto considered a fortuitous coincidence. The author argues that such is in the highest degree improbable, and accounts for the anosmia by the destruction of the pigment of the olfactory region. Numerous arguments are used to show that this pigment plays an important part in olfaction, and that the keenness of this sense in man and mammals depends, in great part, on the intensity and extent of nasal pigmentation. Reasons are also adduced for believing that pigment is of use in the reception of auditory impressions, so that there would be a certain similarity in this respect between the three main organs of special sense, the eye, the ear, and the nose. Finally, an hypothesis is advanced as to the manner in which the pigment operates, and especially as to the manner in which it operates in olfaction.

THE CONTAGIOUSNESS OF THE GENERAL SYMPTOMS OF SYPHILIS.—Freeman J. Bumstead, M.D., Professor of Venereal Diseases at the College of Physicians and Surgeons, New York, in an interesting article contributed to the July number of the Humboldt Medical Archives, published at St. Louis, says: "The fact that any of the general symptoms of syphilis are contagious, has only of late years been placed beyond dispute. How and why it was so long ignored is known to every one, viz., through the great weight justly attached to the name of Ricord, who however, confined his experimental inoculations of the secretion of general symptoms either to the patients themselves, or to persons already infected with syphilis; and since syphilis, like small-pox, vaccinia, &c., is a diathetic disease, his inoculations were necessarily failures." In 1856, Langlebert first expressed the opinion that secondary contagion would produce a chancre. In 1859, Rollet produced abundant proof in favor of this assertion. In most of the reported cases, the infecting lesion has belonged to the secondary period, and has usually been a mucous patch. Independently of any greater degree of virulence of the syphilitic virus in the secondary over the tertiary period, there are two reasons why mucous patches should be a fruitful source of contagion: -1st. This lesion occupies those

portions of the body, the orifices of mucous canals, where contact is most likely to take place with other persons (immediate contagion), or where the virus is most likely to be collected upon common household utensils, and conveyed to others (mediate contagion). 2nd. This lesion is one of the most persistent and most prone to return of all those belonging to syphilis. Thus we find mucous patches upon the lips of a nursling, the origin of a chancre upon the nipple of its wet-nurse, and those about the vulva in women, a fruitful source of primary syphilis upon the penis in men. I have met with a number of instances in which young men, with plaques muqueuses upon the lips, have inoculated the lips of their sweethearts; also with men, who in illicit intercourse contracted a primary sore in the neighbourhood of the mouth, instead of in the more usual situation, without any unnatural mode of indulgence. Instances of mediate contagion from secondary lesions are also not uncommon. for example, the case reported by Rollet, in which a housekeeper contracted syphilis by using a spoon shortly after it had been used by her cook, who had mucous patches on her mouth; take the extension of syphilis among the glass-blowers in France, who use the same tube in common for blowing; also the repeated instances occurring in the practice of an aurist in Paris, in which this disease was conveyed to a number of patients by means of an eustachian catherer. I recently observed a case in which a young man contracted the disease through the medium of the mouth-piece to his pipe, which he lent a friend who called at his room, and which he smoked immediately afterwards. The most remarkable instance I ever met with, was a chancre developed upon the under surface of the upper eyelid in a man, who must have contracted the disease from a contaminated towel. But, in addition to mucous patches, the contents of the pustules of ecthyma have been proved to be contagious (Vidal); and the virulence of the blood of syphilitic persons has been placed beyond dispute by Pellizari. Now that this latter fact is established, is there not reason to believe, that, although syphilitic virus may be more contagious in the early than in the late stages of disease, it does not entirely lose this power at any period of its activity? While the contagiousness of tertiary syphilitic is highly probable, it is still difficult to point to cases which demonstrate it. The least doubtful case I ever heard of was one that I treated by letter a few years ago. The patient was a well-known surgeon of the West, who in operating upon a case of extensive syphilitic necrosis of the cranium, had a chance developed upon a finger, which was, at the time of the operation, slightly abraded. The patient had had no secondary symptoms for two years. The chancre upon the surgeon's finger was followed by the usual pain of general symptoms. The surgeon was confident that he had not been brought in contact with syphilis before for several years. His age, standing, and powers of observation, all added weight to his statement. Yet the possible sources of error are so numerous, that I would not adduce the case as one beyond question. Undoubted proof of the contagiousness of the late symptoms of syphilis to the point of demonstration, must either be sought for in experimental inoculation of some of the few tertiary lesions which furnish a secretion necessary for the purpose, or in the clinical observation of cases in which all sources of error are absent. Such proof, I believe, will yet be found.

Variola, Varioloid, Varicella.—Dr. Wolfe, in reference to the relationship of these three diseases, maintains that they are simply results of the action upon the system of one and the same virus, but of different degrees of intensity. This opinion is based upon observations made during a variolous epidemic which prevailed in a hotel of cadets, during which there occurred simultaneously, in common with cases of genuine, unmodified variola from contagion, cases also of unquestionable varicella and also of varioloid. Dr. W. further remarks that he has often observed the occurrence upon the skin of a true vesicular exanthem to be preceded by the same scarlet efflorescence as is usually observed to be a precursor of admitted variolous disease. Further, he has found the eruptive fever in cases of varicella of extraordinary severity, and the eruption to be attended with severe anginose suffering as in unmodified variola, and the eruption to terminate not by a small hard exfoliation, but with a genuine scab, leaving on its separation a permanent cicatrix.—Centralblatt f. d. Med. Wissenschaften, April 17, 1869, from Deutsche Klinik, No. 7.

RECIPE FOR BURNS.—Make a saturated solution of alum (four oz. in a quart of hot water). Dip a cotton cloth in this solution and apply immediately on the burn. As soon as it becomes hot or dry, replace it by another, and continue doing so as often as the cloth dries, which at first will be every few minutes. The pain will immediately cease; and after twenty-four hours of this treatment the burn will be healed, especially if commenced before blisters are formed. The astringent and drying qualities of the alum will entirely prevent their formation. The deepest burns, such as those caused by boiling water, drops of melted metal, phosphorus, gunpowder, fulminating powder, &c., all have been cured by this specific.—Chicago Medical Journal.

CUTANEOUS AFFECTIONS OF AURICLE.—The auricle is particularly liable to be affected with herpes and eczema, so that these are distinguished by writers on diseases of the skin as "herpes auricularis" and "eczema aurium." The latter is commonly called "sore ears." In infants the disease, which in them is not to be confounded with intertrigo, is apt to break out during the process of teething. In women it is frequently connected with disordered menstruation, both at the time of life when that periodical discharge first occurs and when it ceases. In the acute stage there is great heat and itchiness, the ears are red, swollen, and covered with vesicles, from which issues a fluid; chaps and excoriations are formed. The auditory passage does not fail to become implicated if it has not been so from the first; there is an acrid, puriform discharge from it, and on examination its calibre is found much contracted in consequence of the tumefaction of the lining integument. The cutaneous layer of the membrana tympani is likewise apt to suffer. This state of the parts is accompanied by violent buzzing and singing in the ears, and more or less dulness of hearing. The disease usually becomes chronic. The auricle is sometimes the seat of boils. In a patient who complained of very severe pain in the ear, there was found a boil about the size of a pea within the mouth of the auditory passage. Hearing suffers only for the time, and that in proportion to the contraction of the meatus produced by the attending inflammation. This affection has been met with in a severe form in insane

people. Mr. Travers remarks that the auricle is rarely an original seat of cancer, although not unfrequently attacked by the encroachment of an ulcer on the cheek. Boyer saw the lobe of the ear in a young man so large that it reached to the cheek. He cut the superabundant part away, the wound healed, and the deformity was removed. Mr. Campbell tells us that in the district of Nepaul, in India, the auricle is frequently the seat of firm, fleshy enlargements, and that this state generally co-exists with goître. The auricle, especially the lobe of it, is occasionally observed to be the seat of that form of nævus called *mole*, in which a circumscribed part of the skin is thickened, of a brown colour, and covered with hair.—Cyclopadia of Surgery.

ANÆSTHESIA OF THE SKIN—Is generally a secondary affection. Prolonged Hyperæsthesia may, in some instances, cause it; and we are informed by Dr. Althaus, that these two conditions have been too much separated, seeing they are often allied. This gentleman has seen cases of neuralgia with complete Anæsthesia of the skin of the affected part. Trousseau states:-"There is another phenomena quite the reverse of the above (Hyperæsthesia), which sometimes, although more rarely, exists in neuralgia—namely, Anæsthesia. It often follows on idiopathic non-spinal neuralgias—that is, on neuralgias apparently of rheumatic origin, or due to a slight lesion of the cord. At the outset, and often for a lengthened period, there is only an exaltation of sensibility; but when the affection has lasted a long time, the exaltation is replaced by a diminution,—and, lastly, by a complete loss of sensibility. In such cases, I admit, there is something more than a neuralgia; and the Anæsthesia may be regarded as the consequence of a change in the structure of the cord, or of the nerve-trunk, as occurs in cases of neuritis. It is still pretty frequent to find cutaneous Anæsthesia succeed Hyperæsthesia, especially in Herpes zoster." Again Dr. Brown-Sèquard has observed neuralgia, or irritation of the centripetal nerves, occasioning paralysis and Anæsthesia by reflex action. He mentions a case of Anæsthesia of the lower limbs due to sciatica; also a case of M. Notta, of Anæsthesia of the arm, arising from cervico-brachial neuralgia. Indeed many cases of paralysis can be traced back to hyperæmia and œdema of the neurilemma, as well as to rheumatism. Anæsthesia frequently complicates sciatica. Dr. Anstie states, that, in the early stage of sciatica, there is almost always numbness of the skin previous to the first outbreak of neuralgic pains, and during the intervals between the attacks; the tactile sensibility is likewise much diminished. Affections of the vaso-motor nerves are considered by many to be the cause of Anæsthesia, the office of these nerves being to preside over the blood-vessels and nutrition of the ultimate tissues. But some cerebro-spinal nerves may fulfil the same function, and, being abnormally affected, may give rise to the same disease; although, to a more limited extent, an instance of this may be observed in the chorda-tympani presiding over the secretion of saliva, which secretion, Ludwig asserts, is regulated by the fibres of the fifth nerve, as the excitory, and the sympathetic as the inhibitory. Though the sensibility to pain may be lost or diminished, the application of heat or cold may be distinguished. On whatever part Anæsthesia occurs, alteration in nutrition takes place eventually. Dr. Althaus has recorded a case, in which the first symptoms were inflammation, afterwards compression and atrophy of the fifth nerve, then loss of

muscular sensibility about the face. The conjunctiva was anæsthetic, and the sense of touch, as also temperature, absent. If the head is affected, the part may become bald. I have observed an affection of the hairs, which may be called Fragilitas crinium, or extreme brittleness of these structures, as in the following case. J. M., aged 45, consulted me on March 4th, 1868, for a "breaking short," and brittleness of the hairs of his left whisker, which had existed for about one year—the skin of the affected part being less sensible to touch than formerly. He cannot offer any explanation of how the affection commenced, and never had syphilis. His health, latterly, has not been good; is "nervous," and easily agitated; sleeps badly at night; and troubled with dyspepsia. No parasite could be detected on the hairs, for, at first sight, they presented some of the appearance of the declining stage of tinea circinata, except the brany desquamation of the cuticle. The hairs were uneven in length, fissured longitudinally, extremely dry, broken in various proportions, but of the natural colour, which was black. I considered the affection to depend on atrophy of the hair, arising from defective nutrition, due to impaired nervous power. The fifth pair of nerves are considered to influence the nutrition of the hair. The local causes of insensibility of the skin are thus enumerated by Dr. Damon :-- "The disease or injury of nerves, neuromata, pressure of exudations upon the cutaneous nerves, the effects of heat and cold, and chemical agents. The internal causes of anæsthesia of the skin are-diseases of the brain and its membranes, also of the spinal cord; pressure from extravasation upon the nervous centres, the effects of metallic poisons upon the system, and many chronic diseases, which produce alteration in the blood and tissues. It is a well-known fact, that several agents, such as sulphuric ether, chloroform, and aconite, produce more or less anæsthesia, of an exceedingly temporary duration, when applied to limited regions of the skin. . . . Exudations upon the cutaneous nerves, when they pass over ridges of bone, and in close contact with them, or through bony foramina, may cause so much pressure as to produce first, hyperæsthesia or neuralgia, and afterwards anæsthesia of those parts of the integument to which these nerves are distributed. This happens to the ulnar border of the hand, when there is pressure from exudation, or callous at the point where the ulnar nerve crosses the humerus. . . . Those (diseases) in which the phenomena of anæsthesia is best marked, and is best known are—ataxy, lepra, syphilis, pellagra, the 'spedalskhed,' some case, of alopecia areata, the psoriasis of washerwomen, purpura, and typhoid fever. Diphtheria, chlorosis, albuminuria, and that morbid array of nervous symptoms known as hysteria, must be added to the above list." Thus many neurosis of the skin are merely reflex phenomena, arising from some change or irritation in distant organs, and can be divided "into those which act directly upon the nervous centres, such as pressure and inflammation, and into those which act through the medium of the blood. Amongst the former are cerebral hæmorrhage, tumours of the brain and spinal cord, and chronic encephalitis and myelitis. The causes which act through the blood are the poisonous effects of certain metallic and other substances, which have been introduced into the system either by accident or as medicine." Injury to a large nervetrunk may cause paralysis, and produce increased heat and redness of the part, often followed by exudation and ulceration -On Neurotic Cutaneous Diseases. By H. S. Purdon, M.D.

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Lectures on Ekzema and Ekzematous Affections. By Erasmus Wilson, F.R.S., F.R.C.S., Professor of Dermatology, Royal College of Surgeons, England. London: John Churchill & Sons.

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THE SKIN, BATHING, AND SOAP. By Francis Pear. London: Published by the Author.

ECZEMA, ITS NATURE AND TREATMENT. By Tilbury Fox, M.D., London; M.R.C.P., Physician to the Skin Department of University College Hospital. London: Henry Renshaw.

NINTH ANNUAL REPORT of the Dispensary for Skin Diseases, Glasgow.

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Consumption, as Engendered by Re-Breathed Air, and consequent arrest of the Unconsumed Carbonaceous Waste. By Henry MacCormac, M.D. London: Longman, Green, & Co.

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CALIFORNIA MEDICAL GAZETTE.

OUR INSURANCE COMPANIES.

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ANNUAL REPORT OF CITY HOSPITAL, BOSTON.

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THE GLASGOW MEDICAL JOURNAL, May, 1870.

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Archiv fur Dermatologie und Syphilis. Edited by Drs. Auspitz and Pick. On Prurigo and Pediculosis. By Tilbury Fox, M.D.

Rotice to Correspondents.

Contributors are requested to send in their papers as early in the quarter as possible. When proofs are sent, they should be returned corrected without any delay, addressed to the *Editor*, 5, *College Square East*, *Belfast*.

We regret that Professor Erasmus Wilson's valuable paper arrived too late for insertion in the present number.

JOURNAL OF CUTANEOUS MEDICINE,

AND

DISEASES OF THE SKIN.

CLINICAL NOTES OF SKIN-DISEASE.

By Erasmus Wilson, F.R.S., F.R.C.S., Professor of Dermatology in the Royal College of Surgeons of England.

ABERRANT HERPES.

THE natural history of Herpes teaches us that there are certain of its symptoms which are essential, and others that are not essential. Its essential symptoms are—a state of hyperæmia of the skin, with the development of vesicles on the inflamed surface and a specific and limited course of the disease. A non-essential, though very frequent symptom, is pain, sometimes preceding, sometimes following the eruption, and sometimes present at both these periods. Another of its symptoms or signs is so constant, that it also may be regarded as essential, and it is subject to variation much less frequently than pain. I allude to seat or situation; and seat or situation is generally adopted as the subjective designation of the particular form of the eruption; for example:—Herpes frontalis, herpes facialis, herpes collaris, herpes humeralis, herpes intercostalis, herpes cruralis, and so-forth. Hence, if it be inquired-What a vesicular eruption, developed on an inflamed base, restricted to a single and unilateral region of the body, and having a regular and limited course, may happen to be? The answer will be obvious—It must be a herpes.

The common varieties of herpes have reference to the extent of surface which it covers, the severity of its inflammation, and the degree of its pain. Rare indeed are those varieties in which it occupies more than one region; and rarer still where it is situated at the same time on both sides of the body. It is essentially an unilateral affection, as is strongly impressed upon

us by the aphorism of Pliny—"Enecat si cinxerit"—although some very few cases are on record in which herpes zoster has been seen to encircle the entire body, and without the resulting penalty of death.

That it should be so limited in its regional distribution is the more remarkable when we regard it in its true light, namely, as a neurosis; and we are led to wonder why one nerve, or one branch of a nerve, or even a part of a nerve, or more correctly a single nerve district of the skin, should be the portion of the body alone affected, when the whole of the cutaneous nervous system is exposed to the invasion of a similar morbid state. This question will probably receive some elucidation from a case which I will now detail, in which a number of nerve districts, on one side of the trunk of the body, were affected at the same time.

The patient, in the instance which I am about to describe, was a gentleman farmer aged 53, a hearty, healthy-looking man. He first consulted me, a year previously, for eczema of the face and back of the hands, of no great severity; and he remarked that he had been subject to a similar eruption for twenty years in the spring season of the year. The present attack, however, was of a different character. About the middle of March he suffered from pain in the right side of the trunk of the body. This he attributed to rheumatism; and as the pain, which he described as smarting and tingling, was not very severe, he gave himself no concern about it until he perceived an eruption developed on the painful side, and then he came to me for consultation. The attack was twelve days old when he paid me a visit, and then the eruption of herpes had passed its height; the vesicles were for the most part in a state of collapse, and many of them had dried up into black scabs.

But the peculiar feature of the case was the extent of the eruption and the number of tracks which were apparent on the skin. In the first place, it extended from the upper part of the pectoral region to the inguinal region; and in the second place, no less than seven tracks of eruption made their separate curves over the right half of the trunk of the body, the breadth of each track ranging from one to three inches.

On the front of the trunk, above the nipple, were three tracks; between the nipple and umbilicus two; and in the ilioinguinal region two. On the back of the trunk, however, there

were only five tracks-namely, one over the suprascapular fossa; one over the infrascapular fossa and shoulder; one immediately below the scapula, extending into the axilla; one in the hypochondriac region; and one in the iliac region, immediately above the crest of the ilium. The two scapular tracks probably corresponded with the first two intercostal nerves, and were represented by the two upper tracks in the pectoral region of the front of the trunk. The lower of the two, moreover, threw off a branch track, which descended the back of the upper arm to very near the elbow. The inferior scapular and axillary track also threw off a branch of small size to the under part of the upper arm, and in the axilla divided into two branches, one of which crossed the pectoralis muscle above the nipple to the region of the sternum, and the other passed beneath the nipple also to the sternal groove. The hypochondriac track followed pretty accurately the lower border of the curve of the costal cartilages to the epigastrium. The iliac track, commencing like the other dorsal tracks near the spinal column, divided upon the crest of the ilium into two branch tracks, one of which curved upwards towards the umbilicus, while the other descended the groove of the groin in the course of Poupart's ligament.

With the exception of the peculiarity of distribution now described, evincing the affection, not of a single nerve, or at most of two or three immediately contiguous nerves, as commonly occurs, but of a number of nerves taking their origin along nearly the whole length of the spinal cord, this case offers no difference from herpes zoster in general; and, submitted to the usual treatment, it got well, without severe pain, and without subsequent neuralgia. But, on the other hand, as evincing an aberration from the ordinary standard in its mode of evolution, it is both instructive and interesting.

NEURALGIC HERPES.

Herpes zoster is remarkable for the suddenness of its attack, as well as sometimes for the severity of its precursory neuralgic pains; and, although it may occur in a person completely sound, to all appearance, in constitution, nevertheless it more frequently attacks the feeble or those in whom there is present a predisposition to disease. These points are illustrated in the case of a gentleman, aged 53, who applied to me when suffering under eczema, in March, 1869. He was a man of healthy constitu-

tion, leading an active out-door life in the country, and had experienced previously scarcely any illness. He soon got the better of the eczema, and remained well until the March of the following year. At the latter period-namely, on the 24th of March—he spent a day in shooting, but was ill at ease the whole time with a general, but indefinable sensation of not being quite himself. On the third night subsequently to this day he was seized while in bed with intense pain on the right side of his back, in the situation of the posterior cutaneous branches of the intercostal nerves. This pain was followed by another seizure in the region of the lateral cutaneous branches, and at the same time with an internal pain at the epigastrium. In the morning there were observed three large blotches of about the size of the palm of the hand, occupying the three situations alluded to, that corresponding with the middle cutaneous nerves being the most considerable of the three. These blotches became the seat of the ordinary phlyctenous eruption of herpes, which pursued its usual course, and the neuralgic suffering ceased.

Just one month after the first outbreak of the eruption he paid me a second visit. He said that as long as the eruption continued to progress he suffered no particular inconvenience; but that, as soon as it began to subside, he was seized with terrible pains, which continued, with little interruption, the whole day, and prevented him from sleeping at night. He could only lie in one position, and the pains were chiefly seated in the originally inflamed blotches of the skin; these blotches being still of a red colour and highly sensitive, while the intervening and apparently unaffected skin was also very tender. The pains he compared to piercing the flesh with lancets and carving-knives, with an occasional burning, as if from the contact of hot iron; and whenever from exhaustion he succeeded in falling asleep, he was aroused in a quarter of an hour by the intensity of his sufferings.

The neurosis had now become established as a positive neuralgia; and as the functions of digestion and excretion had been regulated by my prescription of the previous visit, I ordered for him ten grains of quinine at bedtime, with the external use of a liniment of chloroform and aconite. Under this treatment the severe pains gradually subsided; but, as is common in the neuralgia of shingles, he still experiences some slight reminders of his former suffering.

DERMATOLYSIS.

Dermatolysis, or looseness and relaxation of the skin, is essentially a nutritive affection, and it may evince itself either by a simple increase of elasticity of the skin, as in the celebrated example of Georgius Albes recorded by Meekren, or in the more decided form of hypertrophy and hyperplasia of the tegumentary tissues of the body. Of the latter kind are the cases recorded by Alibert, and those other instances of recent observation described by Dr. Wright and by Weeden Cooke.

With Mr. Weeden Cooke's permission, I had recently the opportunity of seeing and examining his patient. She is now eighteen years of age, short of stature, and debilitated in appearance. She has been delicate from childhood, and for several years was much inconvenienced by relaxation of the ligaments of the knee joint. The patella was frequently displaced, and she was always, to use her own expression, "putting her knee out of joint." The special feature of her case, however, is the enormous growth of the integument of the left thigh, from the hip to the knee; the integument has grown in thickness and extent, and hangs downwards in huge folds, one fold overlapping another, and presenting a strange-looking lobulated mass of monstrous proportions—a state which only admits of a parallel in the hide of the rhinoceros.

This extraordinary growth began at the age of 14, and has continued until the present time; the growth fixing on a new region-namely, the posterior aspect of the thigh, within the last twelve months. In general appearance the integument has a brownish tint of colour, and is marked at pretty equal distances with spots, which in some places are transverse slits, two lines in length, and a little depressed below the rest of the surface, and in other places are small conical prominences, like those of cutis anserina, but on a much larger scale. spots of both kinds are the magnified apertures of hair-follicles, but are wanting in hair, and their state of gaping mouths, or prominence from contraction, is referrible to their position—on the convexity of a fold or a stretched portion of the integument on the one hand, or the valley of a fold and a compressed portion of the skin on the other. In other words, it is demonstrable by this appearance of the skin that the follicles have undergone expansion in conformity with the hypertrophy of the stroma of

the skin, but that the vascularity and innervation of the follicles have not kept pace with their increased expansion, and consequently that the hair has ceased to be produced and developed.

The next observations to which we are led in the examination of this case are—the smooth polish and the tenuity of the cuticle; the apparently lobulated internal structure of the hypertrophied integument; its flabbiness; and a jelly-like trembling of the mass. The smoothness and thinness of the cuticle are evidently due to the extension and consequent partial obliteration of the papillary layer of the cutis. The lobulation results from some degree of inequality of nutrition of the normal nerve districts of the subcutaneous tissue; while the flabbiness and trembling of the mass are consequent upon the great increase of the loose connective tissue of the integument to the sacrifice of the more dense and supporting fibrous tissue. There was no evidence of any increase of vascularity of the skin, or of the presence of large veins at the adherent border or root of the folds; there was no evidence of adipose tissue; no lesion of the true skin; but the conclusion with regard to the pathology of the morbid mass impressed upon the mind wasthat the disease must be an aberration of nutrition, a vast accumulation of the lowliest form of connective tissue, a great part being of the gelatinous kind, without a corresponding development of the tissues which constitute the normal integument.

A few days after my examination of Mr. Weeden Cooke's patient, I was consulted by a woman, 45 years of age, for scurfy eczema of the scalp, which had troubled her for seven months; she had also dry eczema of the umbilicus and pudendum. She was a farmer's daughter, and unmarried, and had enjoyed an average state of health; but there was an appearance of bulk about the abdomen, which led to my further inquiry, and to the discovery of a very remarkable state of conformation of the integument of the abdomen, the buttocks, and the thighs. integument of the abdomen formed a large, massive, symmetrical fold, which hung down in front of the upper third of the thighs, and rested against them. The integument of the gluteal region was equally protuberant and elongated behind, and that of the thighs was enlarged to a similar extent. The conformation of the integument was identical with that of a Bosjesman woman, but more massive, and, by comparison, even larger; and the

patient complained that she suffered very considerable inconvenience from her bulk, which she likewise observed had been gradually increasing for several years.

The external appearance of the skin gave the idea of a lobulated structure of the mass; it was nodulated on the surface and hard to the touch; and evidently contained fat in considerable abundance, as well as hypertrophied connective tissue. In these respects it was different from Mr. Weeden Cooke's case. The departure from the normal standard of health was not so great; and it became more closely allied and fell into the same category with the kind of hypertrophy which is seen in the Bosjesman woman; for the large podex and thighs and pendent abdomen of the latter I am inclined to believe to have had their origin in a pathological rather than in a physiological condition of their earliest possessor.

The nodulated appearance of the surface of the skin was evidently occasioned by the attachment of the cellular septa of the adipose lobes. When supported by the hand, the enlarged masses of integument produced the impression of considerable weight, and at the same time conveyed the idea of flabbiness and the tremulous oscillation already mentioned in reference to the previous case.

The recorded cases of dermatolysis, although few in number, lead to the belief that they are due pathologically to an aberration of nutrition consequent on defective innervation. In the remarkable case of Eleanor Fitzgerald, published by John Bell in his "Principles of Surgery," the abnormal growth took its origin in an injury occasioned by a shock of lightning. Dr. Wright's case was that of a patient suffering under epilepsy, followed by mania. Weeden Cooke's patient was delicate and susceptible in constitution, dwarfed in size, and deficient in nutritive power. And I have reason to suspect that the nervous system of the patient, in the case which I have just recorded, was not free from the imputation of debility.*

^{*} For a special article on Dermatolysis, see Journal of Cutaneous Medicine, vol. iii., p. 262.

A POINT IN THE TREATMENT OF THE EARLY (CON-GESTIVE) STAGES OF SKIN DISEASES.

By Tilbury Fox, M.D., Lond., Physician to the Skin Department of University College Hospital.

I HAVE much hope that ere long—as an immediate result of the progress which is being steadily made in our knowledge of the intimate pathology of cutaneous diseases, especially by German observers, Neumann, Auspitz, Kobner, Moritz Kohn, and others—we shall break away from the habit in which we have so long indulged, and to which we are so blindly wedded, of seeking for "specifics" for the cure of diseases of the skin; and that with a better knowledge of what we have to deal with we shall soon begin to be guided by definite therapeutical principles to as large an extent as is the case in our management of any other class of diseases.

It seems to me that, as regards internal remedies, this most desirable reform will be indirectly forced upon us by another circumstance—viz., the steadily diminishing confidence which the more enlightened practitioners are showing towards arsenic as the remedy for every cutaneous ailment.

I have been dissatisfied with the metal for years past in the majority of skin affections, and share Hebra's views as to its impotence against the mass of cutaneous ailments. Fully admitting that now and again, and in certain cases, it acts, if you will, magically, yet in the mass of skin diseases, and all save those of a scaly nature, it is only after long and tedious courses, and large quantities have been taken, that amelioration, if any, occurs. Then it is a question whether it acts more under these circumstances than a tonic to the nervous system, and not so efficiently as other drugs. My experience of arsenic-givers and giving is large. The drug is a remedy that disappoints me, if only that it is too long over its curing work, when it cures-let alone its failures—and one that now rarely figures in my prescriptions. So convinced am I that we can cure the bulk of our cases more rapidly by means other than the exhibition of arsenic, that I am willing to face the outcry of the host of specific lovers which will be raised, no doubt, at an attack upon the only remedy they possess in the treatment of cutaneous ailments. Once shake the existing faith in the believed universal virtues of

arsenic as the remedy for skin diseases, and the way is very decidedly, and at once, opened out for the introduction of rational modes of treating these disorders. At present, arsenic unfairly "stops the way."

What happens when nine out of ten of us are called to treat a case of skin disease?—(I would be understood as blaming myself equally with others in what I am going to say.) The mere mention of the seat of the disorder—the skin—at once suggests to us, mentally, the necessity for the exhibition of arsenic, and the prescription we are wont to write is the proof of the truth of this statement. We now are pretty well assured that the action of arsenic, so far as the skin is concerned, is upon its vascular supply; arsenic tends to diminish congestion, by restoring the tonicity of the vessels. That is what I am told is the doctrine I must accept. Now the researches of pathologists have shown that the starting-point of diseases of the skin varies quoad the structural elements of the skin. Now it is in the blood-vessels, now in the nerves (perverted innervation), now in the cell elements of the rete, or of the fibrocellular tissue, or of the gland sacs, and so-on. In the latter instances the vascular alteration is a secondary, not a primary condition. Then again we have certain alterations of the vascular supply (take erythema of the face, leading, it may be, to acne) due to reflected irritation,—as in dyspepsia. Now if arsenic acts directly on the blood-vessels, and disease originate in the cells or nerves, it is clear that we are using, in many of these conditions just named, a useless remedy, or at any rate we are operating upon the secondary items, and not the primary changes in the disease.

Two things are certain then:—that increasing pathological knowledge is shaking our faith in arsenic, and, as a consequence of this, we are driven to seek for means, in treating skin diseases, based on the recognition of the exact changes in them—to seek, in fact, for "principles" of treatment. The same line of remark applies to external medications. The cutaneous pharmacopæias of most of us include a very few drugs:—Mercurial compounds, notably the nitric oxide; carbolic acid, tar, sulphur, and zinc ointment applied, be it remarked, not in accordance with the varying nature of the morbid processes against which we contend, but empirically in a thorough and haphazard fashion, and regardless of the diversity in character and essence of the

pathological changes of the several diseases. It is the same in regard to the use of local, as in that of general remedies, —we seek for "specifics." Let me, in illustration of this fact, refer to the common treatment of scabies. The cause of the disease is the burrowing of the acarus in the skin. Sulphur kills the acarus:—say we sulphur, and plenty of it, a little hellebore to help, kills the acari, and cures the disease. forget that the burrowing of acari at first is found about the hand; that as a consequence, through the agency of the nerves, irritation is set up in distant parts,—the forearm, the trunk, the thigh, giving rise to what is erroneously termed lichen, but which is only congestion of follicles, demanding a wholly different treatment from that which is adopted. The result is, that, instead of using soothing remedies to an irritated part free from acari, or leaving that part alone to get well on the cause of irritation being removed, we increase the distant irritation whilst we actually destroy its cause, and not only prevent that irritation (and its effect) from subsiding, but so increase it, as to set up a new disease—an eczema; all the more certainly, too, because our specific remedy, which is an irritant in itself, is altogether too potent, or its use continued longer than is necessary for the object we have in view. I see this constantly in practice. To give a practical turn to this note—for I do not dignify it by the title of "paper"—let me refer to one important principle of treatment to which I think we do great violence in our treatment of skin complaints—the principle of using soothing remedies locally to all conditions and stages of cutaneous maladies in which active congestion is a feature.

By a soothing treatment, I mean such as prevents congestion, and secures the exclusion of air from the diseased part. The access of oxygen is the great accelerator of changes in the inflammatory stages of skin diseases, especially where the cuticle is more or less destroyed or absent. The remedies that most effectually soothe are baths of various acids, astringents and powders, and simple non-rancid unguents to which astringents are added. Sometimes fatty substances rather increase the irritation, especially if at all rancid. Now what is this kind of treatment, especially for the exclusion of air, but the securing of rest for the skin. In proportion as our knowledge of the pathology of disease increases, we learn the definite influence of external conditions and agencies in operation upon the skin in a

diseased state, and acts and agencies which we thought of little moment, or even insignificant for or against the cure, appear to us, in the progress of our better knowledge, of great importance. It is sometimes difficult to bring ourselves to believe that simples are most efficacious; the very simplicity makes us attach little importance to these simples. We are very apt at the mention of them to say—"Oh, yes, I know that of course," but to neglect, nevertheless, what we feel without hesitation is so self-evident on reflection. These simple things, indeed, are overlooked in practice. In the early stage of a disease which general experience has taught us will very likely become chronic, and, it may be, pertinaciously obstinate, the natural idea and desire is, cut it short, if possible, by heroic measures. I do believe that this feeling leads us to do more harm than good in the early congestive stages of many skin diseases.

Now a simple soothing plan of treatment, therefore, acts in two ways:—First, negatively, in so far that it takes the place of the use of more powerful remedies that would increase congestion; and secondly, that it directly tends, of course, to diminish congestion. This suggests the question—What relation has congestion to disease?

Take urticaria: here it is secondary to the loss of tonicity consequent upon perverted innervation. Take psoriasis: it is now taught that this disease is merely an overgrowth of the cells of the rete, due to hyperæmia and statis in the capillaries of the papillary layer of the skin. Take lupus: it is the consequence of the demand made upon the circulation for sustenance, by a rapid growth of entirely new granulation tissue. In the first, congestion is of little importance per se; in the second case (psoriasis), at the outset, it is the most important point to be alluded to; for if we can cut off the supplies, the hypertrophic growth of cells cannot take place; and in the third disease (lupus), secondary though it be, to the real mischief, yet it may, under certain circumstances, be a possibility, where the disease for instance is just beginning, to check the congestion, and thereby starve the disease into submission. It is in the earliest stages, before the deep vessels are seriously involved, and when the congestion is impressionable, that our soothing remedies do great good, and it is also at this time, and under these circumstances, that the use of irritants is sure to do harm. So fully am I persuaded of this from clinical observation, that one of the principles of treatment which I most dogmatically teach to students with, it may be, tedious reiteration, is this:—"Wherever and whenever you meet with a hot, red, tender, and irritable skin complaint, be sure you do not apply any irritant, but invariably soothe."

I will mention diseases in which the adoption of this principle of treatment is often accompanied by eminent success:

—Acute general psoriasis of the young; erythema and acne of the face; erythematous lupus; lichen ruber; eczema, and syphilitic roseola.

Acute General Psoriasis.

Some of the best results I have ever seen in the treatment of this form of disease have been in young children recently under my care in University College Hospital. I found that the application of tarry applications have considerably increased the congestion of the skin; the disease has consequently spread, and I am sure been prolonged; but with alkaline and bran baths each night, with subsequent oiling, and prescribing codliver oil and good living, I have soon put my patients into good condition again. This is my plan in future for all cases of acute general psoriasis where the skin is much congested.

In regard to the use of tarry preparation in psoriasis in general, I am convinced that when congestion is at all well marked it should be used with caution, and if it irritate I prefer the use of wet packing for a little time before recurring to its use again.

Erythema of the Face and Acne.

Very recently we have been pitting different plans of treating acne and erythema of the face, one against the other, amongst my patients at University College Hospital. It so happens that a good many American physicians have been to see our practice after visiting Hebra'Clinique at Vienna, and have as usual eulogised the soap treatment in vogue there. Well, we have tried it, but I will not try it again—for all my cases have got worse wherever there has been any marked congestion. In cases of torpid action of the skin of the face generally, unquestionably it rouses the sluggish follicles into activity, and helps the cure of the disease, but it then acts in the same way as do the many compounds of sulphur in repute; but in the

early stages, and where the face flushes actively after meals or exposure, soothing remedies, and none so good as a lotion made with about half an ounce of pale prepared calamine powder—frequently applied after hot bathing, with suitable internal remedies to meet dyspepsia, pyrosis, and uterine troubles—never disappoint it seems to me; but stimulants applied externally, whilst they now and again act happily in the early stages, very oftentimes extend the congestion much beyond the original area and degree. I am not speaking of course of the chronic stages of disease.

Lupus.

I speak especially of erythematous lupus. Clinically, the results of employing some mild lotion containing an impalpable slight astringent powder, are very satisfactory. This is my favourite plan of treatment, in connexion with suitable internal remedies, for anæmia, sparcity of fat, lymphatic or strumous temperament, under-feeding, and so-on. The most suitable cases are those in which the disease is so thin that the pressure of the finger occasions the congestion to disappear, and nearly as it were obliterates the disease. There may be specks, or almost tubercles, here and there formed by the new granulation tissues, which can be destroyed by caustic potash in solution, the use of the soothing remedy not in the least being interfered with. Given a mass of new lupus tissue and much congestion, the certainty is that the former will spread if irritants are applied; lessen the surrounding congestion, and the disease will, with perhaps one application of caustic, rapidly go. I speak from actual cases recently under my care. The object is to check the congestion, and so starve the disease or cell change that induces the congestion.

Lichen Ruber

Is a very rare disease in England. I have recently seen two cases of the disease which illustrate my point so well that I cannot help referring to them. This disease is characterised essentially by the development of solid red papules (lichen ruber), caused by the effusion of lymph about the hair follicles. In one of the cases I have had no difficulty of seeing the early stage of this disease, and it commenced by rapid engorgement of the follicular plexuses; it seems to me to be dependent upon disorder

of the sympathetic nervous system. The skin is generally red, and "burns" intensely, the congestion being increased by excitement and worry and dyspepsia. In fact, the capillary congestion seems to be quite in character, like that of blushing. Now I know, as the result of careful experiment, that it is very easy to aggravate the congestion in lichen ruber. Too hot a bath will do it—the heat of the bed—warm drinks—a cold wind; sleeplessness, with the mental irritation attending it, will do so. Even arsenic, which is said by Hebra to be the remedy for the disease, if pushed far enough, will certainly, as in one of my cases, increase the irritability when its semi-poisonous operation fairly commences.

The exclusion of air by a semi-paste made of zinc, glycerine, and liquor plumbi I found very efficacious, and when arsenic failed my case got well with that external application, and the free exhibition internally of assafeetida.

Eczema.

Without entering into the intimate pathology of eczema, I may be permitted to say that it seems very clear that there is no special blood state or diathesis upon which eczema depends, but that it results from, in the first place, perverted innervation—this being capable of directly inducing, not only vascular changes, but even changes in the cell elements of the skin. The grounds upon which this view of eczema is taken, and on which I base the assertion that eczema is a catarrhal inflammation of the skin, have recently been discussed in the Lettsomian lectures, which I delivered before the Medical Society of London this session. My point now is, that the application of soothing remedies acts in eczema in the early congestive stages in two ways.

It allays irritation of nerves directly—hence the value of applying poultices and fomentation; and secondly, it diminishes the congestion, which favours the "discharge" of eczema. The vesiculating process breaks away the cuticle, leaves the rete and it may be the derma exposed, and favours the free access of oxygen. The glycerine plasma and oxide of zinc and starch powders and pastes act under such circumstances with the best effects.

I might refer to other diseases, but I think I have said enough to indicate the value of following the very simple

principle of treatment under discussion. I hope it will not be thought that I am at all inclined in any way to side with those who advocate "the expectant treatment of disease," as far as, for instance, to the exhibition of mint water in acute rheumatism. I am scarcely so cruel as that. I yield to none in the freedom and faith with which I use even potent drugs to skin mischiefs after their congestive stages have passed or succumbed to our remedies. Nor do I think the use of soothing remedies at all part of a do-nothing system. Negatively, it prevents much harm, and positively lessens tissue charges, through its control over congestion.

One more point I am anxious to call attention to touching the influence of active congestion in skin diseases. It is of little use to treat the congestion itself when the cause of the congestion is exceptional, such as the free circulation of excreta. This is a very active cause of intensification of congestive phenomena. It constantly happens that soothing remedies fail where we should expect them to act satisfactorily. The reason is that we overlook conditions of the fluid circulating through the capillaries of the diseased part, which do neither more nor less than "irritate" from within as much as cold or acrid substances do from without. The retention of excreta from deficient kidney action, or liver action, and gout, at once occur to some here. We speak of gouty eczema, gouty psoriasis, gouty lichen. To our minds these expressions mean that gout causes the eczema, the psoriasis, the lichen, as though it could be the vera causa of pathological processes the most dissimilar. To me they mean that these diseases may occur in gouty subjects, and are intensified, aggravated by the circulation of retained excreta, and that the treatment should be adapted to remove the exceptional cause of irritation,—which will ensure chronicity, if not removed, -in conjunction with the remedies appropriate to the eczema, the psoriasis, or the lichen. &c.

I have thus tried to indicate that by judiciously following out the principle of soothing irritative conditions of skin disease we may conduct our cases with greater satisfaction than heretofore to a successful issue.

ON THE ANCIENT LEPROSY, OR ELEPHANTIASIS GRÆCORUM.

By J. L. Milton, Surgeon to St. John's Hospital for Diseases of the Skin-

(Continued from page 94.)

NOW proceed to give the particulars of the cases of two patients who were under my care for some months. They were both in St. John's Hospital at the same time, and both their histories were recorded and given to me by the younger of the two—a gentleman who had been well brought up, but suddenly reduced to very narrow circumstances by the illness and death of his father in East India. They were also both Irishmen, the elder patient having contracted his malady in Trinidad, and it was difficult to refrain from moralising on the strange chain of circumstances which had brought together, in a small London hospital, these two men, natives of the same land, and yet so long sojourners at what might be very justly called the extreme ends of the world.

Case I.—Thomas C---, æt. 18, was admitted into St. John's Hospital, under the care of Mr. Milton, April 16, 1867, suffering under well-marked symptoms of leprosy. He is of Anglo-Irish parentage, his mother being of pure Irish, his father being of mixed English and Irish descent, but was born in the Madras Presidency. He has one brother and one sister, who have neither of them shown any traces of the disease. When a lad he was sent over to Ireland to be educated. Four years after leaving India, or in May, 1863, the disease first commenced in the shape of a pricking sensation in the right little finger, which was gradually followed by complete insensibility of the part, the insensibility slowly extending along the ulnar side to the wrist. It next attacked the ulnar side of the third finger, and then the same side of the second finger followed, the forefinger being the last affected, and then in a less degree. During the next two years the anæsthesia continued to spread steadily till, on the inside of the arm, it reached almost to the armpit; on the radial side it extended, however, only as high as the elbow; indeed on this side it spread altogether more irregularly and slowly. In November, 1865, he first of all noticed a thickening of the skin over the right eyebrow, with

some redness; by Christmas this had completely developed into the form it wears now—that of a tubercle. Another soon formed below the right eye, and by the summer of 1866 his face was pretty well covered with them. In the spring of 1866 several small hard patches, accompanied by tubercles, came out on the posterior and upper parts of both thighs; they were at the beginning more prominent than they are now, and were from the first devoid of sensation. Anæsthesia now attacked the left leg, all the lower part of which became insensible; subsequently to this the right leg was affected in the same way. At this time too the left arm likewise became slightly affected; but for some time previous to his admission the disease seemed to be stationary there, whereas on the legs the stains and tubercles continued to develop themselves. About the time at which they first showed themselves wasting of the muscles of the right thumb began to appear.

His face is now (April, 1867), entirely covered with tubercles of a dusky colour, of every size, from, almost imperceptible risings of the skin to the bigness of half a small walnut. They are for the most part smooth, only one here and there bearing a few small scales, and are quite painless. The hairs have not as yet fallen out of any part invaded by them. For some little time past he has suffered a good deal from pain in the right arm, and there seems to be an inflamed lympathic gland near the elbow; a lymphatic vessel too shows itself in the form of a long reddish streak running in the middle of the arm from below to above the elbow; otherwise he has not suffered anything in the way of pain, and his health is not perceptibly affected. There are several tubercles on the under part of the chin and on the sides of the neck, but nothing of any consequence on the back of it. Nearly the whole of the right arm and hand is covered with brown stains of every shade, but on the left arm there are only some irregular patches of this kind, varying in size from that of a pea to that of a crown piece. In every part where there is a stain sensation is quite lost, and he has, he tells me, frequently amused himself by cutting them with a knife, a performance which caused him no pain. The blood flowed as from a cut in other parts, but he thought it seemed blacker than natural. A specimen, however, which he procured for me in this way seemed quite normal. The stains on the legs have began to spread very much, but the distribution of them and

others considerably on the two limbs. The pulse is 96, soft and moderately full.

The summer before the disease first appeared he suffered from what the medical gentleman who attended him called scarlatina, and in the summer of the following year he was again attacked by a similar affection, which this gentleman pronounced to be a return of the scarlet fever. I am, however, disposed to think it was in both cases an outbreak of that fever-ishness, general disorder, and erythema, which sometimes precede the appearance or exacerbation of leprosy.

Throughout the progress of the disorder he noticed that it was always worst in winter, at which season indeed it first of all made its appearance, and that the relapses and progress of the complaint invariably took place at this time of the year, whereas in summer it either remained stationary or improved a little.

It would be difficult to imagine anything more wretched than the condition of this young gentleman-objectively speaking at any rate. It is no exaggeration to say that he was an utter outcast. His nearest relatives, his mother and sister—the very persons who under other circumstances would have been the first to nurse him, shrank in dread from him; they not merely feared to touch him, but were in constant dread lest he should touch them, or anything belonging to them. The reader may therefore judge what the feelings of others must have been towards him. One surgeon turned quite ill after seeing these two patients, and several who had seen them once refused to do so a second time. One therefore ceases to wonder at finding that the leper has from time out of mind been an object of fear and abhorrence, especially among the ignorant and superstitious, and that he has ever been driven out from society, and caged up with his fellow-lepers, as though he were some pestiferous and unclean thing upon which God had set the sign of His wrath. Yet this poor fellow himself scarcely seemed to realize his position in the least. He went out but little in the daytime, it is true, but in all other respects he hardly appeared to consider that his state was to be pitied, much less that he was stricken with a hopeless and horrible malady. Though, in answer to all his repeated inquiries, I felt that I could only reply vaguely, and that I never could hold out any hope of being able to do him any good, indeed I did not consider that I was justified in doing so: though one system of treatment after another failed to benefit him to any material extent, and the relentless malady continued to progress more or less slowly, he was full of hope up to the very last day that he continued under my care.

I tried a large number of remedies in this case—calomel, bichloride of mercury, grey powder, nitric acid, nitro-muriatic acid, strong decoction of sarsaparilla both hot and cold, quinine, steel, and various purgatives, the Zittmann treatment, &c., but without doing any permanent good. Some of the remedies, as quinine for instance, though given in what I considered very moderate doses—one grain in solution two or three times daily seemed to act injuriously from the very outset, and were therefore very soon given up; others had a long trial. For a time pretty large doses of calomel, beginning with a grain and gradually increased up to three, and occasionally four grains, given at night, followed by the use of tolerably strong doses of black draught the succeeding morning so as to produce a very free action of the bowels, seemed to arrest the progress of the fell malady both in this and in the succeeding case; but having had no previous experience in the treatment, and having been able to find no clue in books to any consistent and feasible system of medication, I gave up this plan so soon as ever the mouth became even very slightly affected. The patients however soon felt themselves so much worse for the change that they of their own accord asked me to give them the purgatives again, and I therefore did so, but it was useless now to make the attempt. The medicines seemed to have lost all power of arresting, or even ameliorating, the disease, and I never again recovered the same control over it. The patient however took a more hopeful view of matters: he considered that the action of these remedies had been to restore the sensation to a considerable extent in the feet, especially in the outer side of the right foot.

With one short interval the patient remained in St. John's Hospital up to June, 1868. During this period there was, so far as I could see, but very little change, and that little was upon the whole always for the worse. Now and then the disease appeared to be stationary, especially under the influence of the purgatives, but this, as I have said, was of very short duration. The hue of the skin gradually became darker, the tubercles spread a little, a firm scale formed over one elbow, while a large thickish crust appeared occasionally on the outer side of the left nostril; but with these exceptions there was not any

material visible change, nor at the present time does there appear to be any. Except occasional attacks of pain in the right arm, the liver, and diaphragm, of which the patient complained a good deal, he did not appear to suffer much. He was energetic enough, occupying himself busily in writing and reading, and his mental faculties seemed in no way impaired.

It is not in my power to record anything of interest connected with the pathology of the case. I saw nothing but what has been seen before, and recorded almost times out of number. I made some examinations of the urine, and proceed to give the results, which however are not very complete, excessive occupation at the time having prevented me from devoting so much attention to the subject as I could have wished to do. I believe however they are substantially correct, and that the reader may fully rely upon them, crude as they are. I have entered them here in detail, so that any inaccuracies may be rectified. The method of analysis followed was that laid down in Dr. Golding Bird's work.* The urine, I may here say, had almost from the first a most disagreeable faint smell, and was very often of a pale, dirty-green hue. It was for the most part strongly acid, and the sp. gr. generally varied from 1.008 to 1.012.

Some rather hasty observations having shown a remarkable absence of urea, further search was made to see if this view was well founded, as also to discover whether there was any albumen in the urine.

A specimen of the urina sanguinis examined June 4th, 1867, showed no trace of albumen. Sp. grav. 1.012; the sp. grav. of another specimen passed June 7th was also 1.012.

A specimen taken June 16th was intensely fætid, with a fish-like smell; sp. gr., 1.015. An ounce of this urine was evaporated to a fluid drachm, and the capsule containing this set out to cool. When cool the bath was rather more than half filled with cold water, to which three drachms of nitrate of potass and the same quantity of hydro-chlorate of ammonia were added. This was briskly stirred, and the capsule being replaced, half a drachm of cold colourless nitric acid was added, and the mixture briskly stirred with a glass rod. To my great surprise this amount of urine only yielded rather less than a quarter af a grain of nitrate of urea (!), and as the average quantity of urine passed by the patient in the twenty-four hours varied, without

^{* &}quot;Urinary Deposits." By Golding Bird, M.D. Fifth Edition.

exception, from twenty-two to thirty ounces, he could scarcely be considered to expel at this time more than about three grains daily of urea.

A third observation was made on the urine passed first thing on rising, June 23rd. The urine was strongly acid. Sp. grav. 1.006. Two ounces treated in the same way gave less than gr. ss of nitrate of urea. Three days later, five ounces were treated in the same way, except that instead of the crystals of nitrate of urea being placed, as before, on thick blotting paper, and a stream of ice-cold water poured gently over them, this was very gently allowed to cover them, and then the supernatant fluid very carefully removed with a syringe. The capsule was then replaced over the hot-water bath, and a gentle heat applied, which was attended with the formation of orange-coloured crystals. These, when collected and dried, weighed exactly four grains and three-quarters. Calculating this at the proportion of 48 parts of urea in 100 of the nitrate, which is pretty near the mark, we find that the quantity of urea in the ounce was equal to gr. 2.28.

On the 9th of November, 1867, after he had been some time under the influence of purgatives, and had begun to think he was better, an opinion in which I shared at the time, a specimen was again procured of the urine passed first thing on rising. It was entirely free from the dirty-green tinge, and did not smell so offensive. The colour was a fair yellow; sp. grav. 1.020, showing 46.60 grains of solid matter in the 1.000; strongly acid. An ounce of this urine was treated as on former occasions, by evaporation and addition of nitric acid, but the mass, as in every previous instance, did not become nearly solid as it would have done had the normal quantity of urea been present; on the contrary the solid matter did not appear to form more than one-tenth of the whole. The solid matter was next placed upon a piece of thick white blotting-paper, and a very slender stream of extremely cold water was poured very gently over it. When very nearly dry it yielded nearly six grains of nitrate of urea, in the shape of pale orange-coloured laminæ. The probability then is that, as the amount of urine passed on the day this specimen was taken amounted to twenty-six ounces, not more than about seventy-five grains of urea were at this rate daily extruded from the system.

In order to test the presence of uric acid, an ounce of the urine, gently warmed, was poured into a glass containing thirty minims of hydrochloric acid and set aside, after being covered with paper. At the end of twelve hours it was examined, and again at the end of twenty-four hours, but in neither case could anything like a pellicle be detected. A few very minute dark specks were all that could be made out. The urine having been briskly stirred with a glass rod, these specks of uric acid were collected and weighed. They formed a mass hardly bigger than a pin's head, and when placed in a very delicate balance did not at all affect a weight of the tenth part of a grain. Nitric acid and heat showed no albumen, and no white deposit was elicited by heating in a perfectly clean test tube to boiling point. A thin layer of the urine was found into a white saucer, and a few drops of nitric acid were allowed to fall into the centre of it, but no play of colours ensued, nor was there any loss of transparency; only a very faint tinge of purple took the place of the natural hue. There was accordingly no reason to infer the presence of either bile or blood. Although with such a moderate specific gravity, the search for sugar or excess of nitrate of urea might seem, and probably was, quite superfluous, yet it was diligently made, but none of the tests proved the existence of either.

Dr. Bird recommends that in searching for creatine and creatinine an ounce of urine should be evaporated to a syrupy consistence. It appears to me that it would have been more clear had Dr. Bird stated the exact amount to which this quantity should be reduced. It is difficult for a student to understand how such directions should be carried out, or how urine free from sugar is to be rendered syrupy. I may, therefore, state that the quantity spoken of was evaporated to something less than a fluid drachm, and that after it had been set aside to cool a piece of chloride of zinc the size of a pea was added to the decanted liquor, first warmed in a watch-glass, when the whole became converted into a yellowish-brown jelly-like mass, in which I could not discover any traces of the crystals of the triple compound of zinc and chlorine with creatine and creatinine. Examination with the microscope failed to show any crystallization.

There was not much deposit of mucus, and what there was

seemed almost unaffected by nitric acid. A small quantity put into a test-tube, and agitated with an equal quantity of liquor potassæ, became slightly flocculent and cloudy. There was, therefore, no reason to assume the presence of exudation corpuscles. There were traces of oxalate of lime. An ounce yielded three grains and an eighth of earthy and alkaline

Another specimen was taken for examination on December 10th, 1867. It was of a marly colour, or rather of the hue seen in the darker kind of clay of which ink or ginger-beer bottles are made. The total quantity passed during the twentyfour hours was 3 xxvii. There was no great amount of mucus in it. Sp. grav. 1.026—distinctly acid.

An ounce was evaporated to about a drachm, and this, after being carefully chilled down, was mixed with cold colourless nitric acid, and replaced upon the bath containing the freezing mixture spoken of previously. Ice-cold water was then poured very gently over the crystals, and the supernatant fluid drawn very carefully off with a syphon. The mass was then carefully dried and placed in the balance, when it was found to weigh 23:40 grains, a result which again so much surprised me, that I repeated the observation, but with substantially the same result. An ounce treated exactly as in the previous observations for uric acid gave three-tenths of a grain. The reader will, therefore, observe that there was here also a remarkable change. An ounce was now evaporated, and the residue treated by combustion, yielding 4.9 grains. Triturated with water, and again calcined, this yielded six-tenths of a grain. No traces of albumen were found, but there was a considerable amount of urate of ammonia. There was no excess of bile. Liquor ammoniæ brought out the stellar crystals of phosphate of magnesia and ammonia, but microscopic examination only detected urate of ammonia. I may remark that the patient had been very freely purged in the interval between these two examinations, but that he had lived in the same way as before, being constantly in the hospital, and allowed the same quantity of meat. In respect to fluids, he voluntarily restricted himself to a very moderate amount.

If we now place these two observations in juxtaposition with a table of the normal constituents of urine as given by Becquerel, the reader will see what a very great disparity exists between either of them and the natural state:—

1,000 grains of Urine.	T. C.—First Observation, November 9. 1,000 grains of Urine.	T. C.—Second Observation, Dec. 10. 1,000 grains of Urine.			
Weight of urine passed in 24 hours Spec. Grav. *Solids in 1,000 grains Urea ," Uric Acid Earthy Salts Alkaline Salts Extractive Matters	9.817 1.020 46.60 7.0539 A trace, not searched for "," "," Total, 39.5561.	12·118 1·026 60·58 25·685 ·686 1·3714 9·8386 23·009			

The next case was that of George H—, aged 38, a native of Ireland, who was admitted May 17th, 1867, labouring under this disease, which he had contracted whilst engaged as an engineer in Trinidad. He was suffering from both anæsthetic and tubercular-leprosy in a very aggravated form. The disease commenced more than eight years previously, and, according to the patient's version, the first symptoms, which appeared in the left leg, were called into being by an injury to this part, occasioned by a fall while riding down a hill. About a year before this he suffered severely from what he called ringworm, being almost entirely covered from head to foot with patches from an inch to a foot in diameter, and about nine months after the first appearance of this symptom his face became remarkably flushed and puffy. Finding that the symptoms of leprosy got no better, he returned on leave to Ireland, and placed himself under the care of an eminent physician in Dublin. In a few months he had to all appearance recovered, and finding himself so much better he returned to Trinidad, but in a short time the symptoms returned and gained ground rapidly. He now put himself under the treatment of a gentleman in Trinidad, who, he was informed, had been staying there several years for the express purpose of studying this disease. This gentleman put him for several months through a course of arsenic and purgatives, increasing the dose of the former to such an extent that towards the close of the treatment

^{*} According to Dr. Bird's table, calculated from Dr. Christison's formula, the amount of solids in 1,000 grains of urine of sp. grav. 1.018 is 41.94.

the patient says he took four grains of arsenic daily. Of course, this was a complete mistake on his part. He improved, however, so rapidly under this treatment that at one time he thought he was getting quite well, but unfortunately he neglected to take his medicines, and another relapse ensued. He then came home again, and once more placed himself under the care of the medical gentleman in Ireland, whose treatment had previously been beneficial. But his aid was now of no avail; the patient got worse, and then went to a remote country district and consulted a third practitioner, where however he underwent no change for the better, ulceration of both lips and of the tips of the fingers and of the balls of the toes setting in among other symptoms. The treatment employed seems to have principally consisted in giving iodide of potassium and purgatives, and applying zinc ointment to the ulcerated surfaces. He stated that these parts often healed up, and that he got better when using the purgatives; indeed he seemed at times so much better that both his medical attendant and he fancied he was really to get well, but I need scarcely add that improvement proved always only temporary. At last, as he got worse on the whole, he decided to enter at St. John's Hospital, which he did just three years after his return to Ireland.

He was in a much worse condition than the other patient. His lips were so ulcerated and the tongue so thickened, tender, and fissured that he could scarcely swallow anything. He was utterly unable to dress or wash himself, owing to the excoriated state of the tips of his fingers. His voice was thick and hoarse, the nose sunk in, the muscles of the arms and legs shrunk to the last degree, the hands incurved, and nearly all the skin stained with the characteristic hue of leprosy. The skin of the face was tuberculated and dirt-coloured, and there were several large tenaceous crusts on it. The hair of his head looked as if he had been rolling in the dust. From the very first we had the greatest difficulty in getting any nurse to attend on him, even when offered double the usual wages, and one nurse after another left, refusing to continue such an unpleasant task. Towards the close of his stay, indeed we could not induce any one to undertake the work, and as he was dissatisfied he was removed (January 22nd, 1868) to Middlesex Hospital, where he soon after died (April 14th), sinking quite suddenly. During the latter part of the time he was under my care the stench from

him was perfectly awful. The chimney of the ward in which he was placed communicated with that above, in which the secretary and his assistant lived during the day, and I suppose it was by this path that the stench made its way to them, for it did not appear to go up the stairs. Be that as it may, they were more than once made quite ill by it, and on one occasion it was so overpowering, that after being seized with violent vomiting, they rushed out, declaring they could not stay in the hospital. The patient used to cover himself over with the bedclothes, in fact quite bury himself in them, when he went to sleep, and it was when he threw them off in the morning that the dreadful smell diffused itself so much. I never smelt anything like it, and am quite at a loss to describe it. There was no particular fœtor such as that about gangrene; it was a faint, yet hot, so to speak, pungent smell. The other leprous patient did not seem to suffer from it.

The same treatment was put in force in this as in the preceding case; there is therefore no occasion to give it in detail. It will suffice to say that it was useless, though the purgatives sometimes appeared to do good, and at one time I really thought he was getting better. The ulcerations of the lips healed up, and those on the fingers were so much better that he could. dispense with gloves occasionally, a thing he had not been able to do for months; he could swallow food with more ease, and even sit up in bed to read and write a little. With the elastic spirit of his race he now fancied that all his troubles were over, and that he would be ultimately restored to perfect health. Indeed the matron said that he continued to assert to the last that I could have cured him if I liked, and that if I had only continued the purgatives he would have recovered. his exhausted and hopeless state I was afraid to do so, especially as one ingredient in them was a dose of calomel at night (followed by a strong dose of black draught in the morning), and I need scarcely say how strongly the use of mercury to any great extent has been decried in this disease. I therefore suspended the medicines, and shall always regret that I did so, as he relapsed almost immediately; and when at the expiration of a short time I resumed the use of them, they seemed to have lost all hold on the disease. The fact, however, that they did so much good, both in this and the preceding case, and that twice in his previous history the patient had been materially benefited

by the administration of them, tends to show that it is in this direction that we must look for aid.

A specimen of this patient's urine was taken for examination, November 15th, 1867. The whole quantity passed during the twenty-four hours amounted to eighteen fluid ounces. The colour was a good yellow, presenting in this respect a remarkable contrast to that passed by the former patient. Sp. grav. 1.010; acid. An ounce treated in the same way as in the second examination of C---'s urine yielded only gr. 4 ths of urea, while two careful searches for uric acid produced simply twenty or thirty specks about the size of the point of a pin, the largest not being bigger than the fourth part of a very small pin's head. The accompanying marks .. are quite as large. Treated with an equal weight of nitric acid no crystals were formed at the expiration of several hours, and the nitric acid test after heat did not show any brown deposit. No excess of colouring matter was found. Two ounces treated after heat with chloride of zinc were converted in great part into a gelatinous yellowish mass, almost like pus in which there was a slight mixture of blood. No sulphur was detected by the silver test. The deposit from this urine seemed to be principally made up of healthy mucus. It was not ropy, opaque, or viscid, and threw down no sediment. An ouuce of it evaporated, calcined, and triturated with water gave gr. 12 of alkaline and gr.ss of earthy salts.

Another specimen was taken December 16th. The patient had, as in the preceding case, been freely purged in the interim. The urine was brown, and very turbid. Sp. grav. 1 020; strongly acid. An ounce yielded gr. 1 632 of urea. There was scarcely a trace of uric acid when treated with hydrochloric acid, but the microscope showed crystals of this salt. There was no albumen, but blood discs were seen under the microscope. An ounce yielded gr. 1 5 of alkaline salts and 5 gr. of earthy salts.

With the view of not occupying the reader's time unnecessarily, I have not tabulated these results. As regards the cause of the results, I have no conjecture to offer. Whether in the widespread changes of tissue taking place in these men urea was being changed into carbonate or cyanate of ammonia, or what was really going on, I cannot even guess at, and therefore leave it to chemists to solve the riddle. Their food cannot be considered as a factor in the departure from the normal state. They had for breakfast a moderate amount of tea, coffee, or cocoa,

with a little ham or bacon if they liked; for dinner, about ½1b. of meat with bread and vegetables, and half a pint or pint of beer; tea and bread and butter, followed by a light plain supper, as bread and cheese, and perhaps half a pint of beer or a glass of port wine. On an average they must have taken quite three pints of fluids each daily. It is interesting to observe that the relative proportion of the uric acid to urea, about 1 to 30 or 8·1 to 255, was closely preserved. The greenish tint spoken of in the urina of the first patient was totally different to everything I have seen. Though very pale, it was of a decidedry green tint. At the same time the urine differed very considerably in appearance from that of hysteria, in which this hue is said to make its appearance sometimes, and there were no indications of bile, which occasionally lends an apple-green tint to this secretion.

THE OIL OF YELLOW SANTAL-WOOD.

By J. L. Milton, Surgeon to St. John's Hospital for Diseases of the Skin.

S I see there is, in No. 14 of the Journal of Cutaneous MEDICINE, a notice of this oil, extracted from a paper in the Practitioner, I take the liberty of making a few remarks on a subject which has interested me a good deal, for more reasons than one. The paper in question brings the oil forward in rather an unfavourable light, for while the gentlemen who have recommended the oil are honestly and fairly praised as hardworking, truthful observers, on whose opinion all may confidently rely, the discrepancy in the matter, when compared with the statements of others who have also investigated the action of this drug, is pointed as a matter of serious importance. That some authors have had considerable success in treating gonorrhea with the oil of santal (or as it is generally, but, I believe, incorrectly called sandal) wood, seems established beyond all question; others, again, have had but very indifferent success, and many have pronounced it to be a failure. One gentleman who wrote to the Editor of the Practitioner, asked whether it was not possible that those writers who had been able to effect such rapid and uniform cures might not be enthusiasts, seeing that he and several of his friends had found the oil fail in many cases. Again, the action of the oil on the system is very differently described by Dr. Henderson, of Glasgow, who has the merit of having first introduced it to the notice of the profession

in this country, and by Dr. H. S. Purdon. The former gentleman found that it acted as a stomachic medicine, occasioning little nausea, and having very little smell; while Dr. Purdon tells us that he often had to discontinue it on account of the nausea it occasioned, and that the odour remained on the hands, breath, &c., even after repeated washing.

Now it is very probable that some part of this discrepancy might be explained by a fact with which those gentlemen do not seem to have been acquainted. The fact is, that oil of santalwood is so excessively adulterated with balsam of copaiba and castor-oil, that the genuine fluid forms in many cases but a very small part of what is administered. Some time ago I was assured by a gentleman on whose opinion I can quite rely, and who was kind enough to take a great deal of pains in order to procure me the information I required, that there was not a pint of pure santal-wood oil to be procured in the market at any price, and yet the supply to the retail houses was so regular and large as to seem practically inexhaustible. The pure oil of santal-wood is of a light, but pale yellow, without the least tinge of brown, almost exactly the same hue as pure, fresh, sweet almond-oil, whereas that generally sold has a tint approaching the colour of copaiba, and a look like mastic varnish which has lost some of its transparency. The pure oil is intensely strong, and so acrid in taste, that I can only compare it with croton-oil. I have not made any experiments as to the dose, but judging from the powerful effect it produced on my mouth, I should not think it possible that any person could take thirty minims of it with impunity. As to Dr. Henderson's statement, that it has a very slight smell, I cannot understand it. I have a specimen of the pure oil now before me; it has been many months in my possession, and yet the smell, when the oil is even slightly warmed, is extremely pungent and most characteristic; in fact the smell seems to overpower that of any material the oil may be adulterated with. With regard to the cures said to have been effected by means of this oil given in combination with liquor potassæ, I may say that the latter fluid, given in moderate doses in conjunction with very small quantities of balsam of copaiba, or mucilage of acacia, linseed tea, veal broth, pale ale, or any bitter infusion, will cure a great many cases of gonorrhea; -a fact which I briefly pointed out many years ago in the first edition of my work on gonorrhea.

THE FUNCTION OF BICHLORIDE OF MERCURY IN THE TREATMENT OF DISEASES OF THE SKIN.

By John Kent Spender, M.D., Lond., Surgeon to the Mineral Water Hospital, and to the Eastern Dispensary, Bath.

THERE is a body of authenticated traditions which justify the use of bichloride of mercury as a remedy for certain diseases of the skin. I do not mean merely as an antidote to the cutaneous manifestations of the syphilitic poison, but as a medicine for some non-syphilitic diseases, though of empiric value and of somewhat uncertain character. It is this view of the question which I wish particularly to discuss now. A sort of mysticism has long surrounded the therapeia of bichloride of mercury; and a few of its supposed mystic properties have been dignified by the trite name of alterative, which simply means that what was dark before, we wish to make darker still. It is a medicine which is often a beneficial harbour of refuge to the weary practitioner, who, having met with disappointments, finds a solace in prescribing what he knows little about, in the dim hope that an arrow shot in a fog may hit the mark.

Further, the reputed potency of this medicine invests it with an august charm. Swift and deadly as a poison, its therapeutics are slow and wary; and it may be hinted that it sometimes receives credit for curing a disease whose "natural history" is to disappear in time. Administered within certain limits, its physiological properties are safe and harmless; and in very small quantities it might be given, probably for a long time, to a healthy adult without much result. Nor does it (within the same limits) readily produce the specific toxical effects of mercury, such as purging and salivation; it is rare indeed for a grown-up person, and still more rarely for a child, to suffer inconvenient or dangerous symptoms.

Now the use of bichloride of mercury naturally divides itself into an external and an internal function.

1. Externally, bichloride of mercury has a reputation as a parasiticide in the form of either lotion or ointment. Long before the pathology of Prurigo was understood, and its dependence on animal parasites recognized, the "yellow wash" was recommended by Bateman as an effectual application. Mr. Erasmus Wilson has published a formula which is now

probably well known, consisting of corrosive sublimate, spirits of wine and of rosemary, in a menstruum of bitter almond emulsion. I have found this lotion of great use whenever the irritation has obviously depended upon parasitic disease; but I cannot endorse its alleged utility in allaying the itching of urticaria, or any of the pure "neuroses." Dr. Waring says that a solution of bichloride of mercury (gr. xx — 3 ss ad aq. Oj) is very beneficial in the treatment of obstinate scabies:* but iodide of potassium ointment may be pronounced safer and better, when sulphur washes and ointment have failed. Dr. Pereira quotes† an ointment composed of from gr. 1/2 to gr. ij of corrosive sublimate to 31 of lard, as an effective remedy for the "contagious porrigo" which spreads among children in schools. Fricke (as mentioned by Dr. Waring) speaks highly of the value of corrosive sublimate when dissolved in a warm bath; and French physicians used to order mercurial pediluvia to excite salivation, composed of half a grain of corrosive sublimate dissolved in a pint of distilled water, in which a patient immersed his feet for two hours.

2. The venerable name of Baron Van Swieten will always be associated with the introduction of bichloride of mercury to internal therapeutics. He anticipated the modern doctrine, that salivation is not necessary for the cure of venereal diseases; and so he made experiments with bichloride of mercury, hoping that he might discover a preparation "that could be diluted at will, and so tried in a very small dose." Locker and Dzondi became warm advocates of the use of this mineral; and Dr. Graves was not less enthusiastic in its praise.

There cannot be any doubt of the general correctness of the dogma, that bichloride of mercury acts in a quiet, unobtrusive manner when administered with judgment, and that its use indirectly promotes the nutrition of several tissue-elements. We easily discern that better nutrition on the skin, because it is the tegumentary covering, and it is everywhere displayed to view. In this sense we understand that the medicine has a "tonic" influence, as Dr. Billing called it, parodoxical as this terminology sounds at first. Nor is it very important to demonstrate whether a dynamic change is wrought in the

^{*} Manual of Practical Therapeutics, p. 303.

[†] Elements of Mat. Med. and Therapeutics, i. 863.

nervous system, or whether a poisoned "plasma" is deprived of its noxious properties.

Bichloride of mercury is much prescribed in the treatment of syphilitic diseases of the skin, and I believe that the following rule will be a competent guide to its use. The chronic, squamous Syphilides are the most amenable to its curative agency; and in children, when we doubt how far there may be a syphilitic root to a squamous disease, it is a good practice to combine arsenic with bichloride of mercury, and to give three doses daily of these medicines. Cod-liver oil may be added if the constitutional necessities of the child seem to call for it. The unquestionable syphilides, which affect the palm of the hand and the sole of the foot, are immensely benefited by bichloride of mercury. It would be too bold to say that the so-called Eczema fissum of the palm of the hand may be always (or even commonly) traceable to a syphilitic contagion; but I have found that no internal means does it so much good as a long course of the same medicine. The true "psoriasis palmaris" of scrofulous children must never be mistaken for a syphilide. Most of the syphilitic skin diseases for which bichloride of mercury is a remedy are intermediate between the secondary and tertiary phenomena. This is important to recollect, because it would be absurd to try and drive away a syphilitic febrile exanthem by mercury in any form.

The gummatous nodules of the skin and their sequential ulcers (a most characteristic lesion of tegumentary syphilis) are not cured by bichloride of mercury administered alone, but a potential energy of a wonderful kind is imparted by adding to it iodide of potassium in solution.* Note how the foul grey surface of a circular syphilitic ulcer vanishes by degrees when this medicine is regularly taken. Get a case in which serpiginous ulceration of the skin is just coming on, and prescribe the double compound of bichloride of mercury and iodide of potassium; quickly the ulcerative havoc is arrested, and sound repair of tissue begins. Nor is this compound less successful in the management of other affections of the skin

^{*} The chemistry of the matter is shortly this:—An alkaline iodide precipitates corrosive sublimate, but an iodide in excess redissolves the precipitate.—See Dr. Garrod's "Essentials of Mat. Med.," p. 88.

belonging to the tertiary order, and which might lead, if unchecked, to destruction of structure.

I do not often give bichloride of mercury to syphilitic children and infants. No one who is not fanatically prejudiced will deny the necessity of mercury for the healing of early cutaneous syphilis; but I have always found the *Hydrargyrum cum Cretâ* so admirably adapted for this purpose that I cannot imagine anything superior to it. In the few cases in which I have administered corrosive sublimate in very minute doses the accident of purging has happened more frequently than when grey powder has been given, even though I usually guard both with opium.

The rôle of bichloride of mercury in the treatment of non-syphilitic diseases of the skin may be formularized with no less precision. The chronic varieties of urticaria are often much benefited by a long course of small doses of this medicine; in several instances I have found it more useful than arsenic or quinine. There are few therapeutic combinations more valuable than bichloride of mercury and colchicum, if the latter medicine seems to be demanded by any special diathesis. Then I advise the bichloride to be prescribed for the chronic forms of eczema, whenever the neurotic element of irritation causes trouble; and for that proverbial difficulty of therapeutics, relapsing pemphigus, arsenic and bichloride of mercury together will sometimes succeed when the former alone has failed.

The obstinate pyogenic diseases of the skin may be improved by lengthy courses of bichloride of mercury with bark or with sarsaparilla. In this way I manage to conquer some obstinate cases, especially if I can get help from the use of the Bath thermal waters, or the sulphur waters of Harrogate.

Certain examples of inveterate psoriasis may be treated with equal success in the same way, especially if they be complicated with hardening or hypertrophy of the subcutaneous connective tissue. It is in these cases that arsenic sometimes fails conspicuously to do any good; or it does far less good than a food-medicine like cod-liver oil.

Most of all do I advocate the administration of bichloride of mercury for the cure of some papular lesions of the skin. When the acute stage of lichen has cleared away, we may prescribe this medicine with much confidence for the removal of the tingling and aching of the so-called lichen urticatum. Cazenave's theory is that lichen is primarily a lesion of sensibility—a true nervous affection; but, whatever quinine may be able to do, it is certain that arsenic often increases the irritation so much as to convert a chronic lichen into almost a febrile eruption, and a patient will look red, suffused, and hot. Chronic lichen agrius is particularly relieved by bichloride of mercury; first the crop of papules disappears, then the subacute redness, and finally the thick and cracked condition of the cutis passes off. All auxiliary local measures will be resorted to by the skilful surgeon; but he will especially avoid the use of external or internal stimulants, though the diet ought to include an ample amount of all the primary elements of nutrition.

Finally, it deserves mention that small and continuous doses of bichloride of mercury form a good (though old-fashioned) treatment for acne. Nor is iron incompatible with it; on the contrary, the system may be rendered better able to bear the mercurial preparation.

The practised therapeutist will know when to leave off the medicine, and will probably recognise the advantage of discontinuing it by degrees, or at least of administering smaller doses at the same intervals.

REMARKS ON THE RATIONALE OF THE ACTION OF ARSENIC ON CUTANEOUS AND OTHER DISEASES.

By John Cleland, M.D., Professor of Anatomy and Physiology, Queen's College, Galway.

BEING one of the many who have not only been in the habit of using arsenic in cutaneous as well as other diseases, but have also been struck with the efficacy of that drug as a remedy, I am induced to put forward a few desultory, and, it may be, crude remarks on the subject, not with the idea that any experience of mine will convince those who remain sceptical of the virtues of arsenic, notwithstanding the copiously recorded testimony of many able physicians, but rather with the view of suggesting the direction in which an explanation may be sought of that efficacy in which my own experience leads me to believe.

The cases in which I have seen the greatest advantage from

the use of arsenic have been mostly of a description in which its virtues are very generally admitted, and appear to me to have been principally cases of eczema and psoriasis in patients of a gouty or rheumatic diathesis; cases of psoriasis in conjunction with uterine affections; chronic inflammatory uterine affections, even although unaccompanied with cutaneous disease; persistent rheumatic ophthalmia, and cases of lupus and palatal ulceration.

The special efficiency of arsenic in diseases of rheumatic character has been pointed out probably in a more instructive manner by the late Dr. Begbie* than by any other writer, and it seems impossible to read what he has written and continue to doubt that at least in a certain class of rheumatic cases this remedy is invaluable. Yet they are not cases of typical rheumatism which are most benefited, but rather that class of cases which seem to be between typical rheumatism, whose pathology is ill understood, and typical gout, whose pathology is well understood, those cases aptly called gouty-rheumatic, in which, along with symptoms of more various character than those of true gout or rheumatism, there is a strong tendency to lithic deposits in the urine. Perhaps it would be only candid to acknowledge that in many cases in which such a constitutional condition has been suspected, and arsenic has given relief, it would be hard to define the reasons on which the suspicion has been founded.

That eczema and psoriasis are affections often dependent on the rheumatic or some closely allied habit is nothing new; and while it may be admitted, as frankly as even Dr. Barr Meadows† could desire, that eruptions of those characters may arise from widely different causes, yet there can be little doubt that they are more frequently associated with such a habit than with any other, and that it is precisely those in which the rheumatic or gouty-rheumatic habit is most apparent which are most benefited by arsenical treatment.

The connection which exists between rheumatic and uterine affections, in which arsenic is acknowledged by many writers to be most serviceable, is difficult to explain, but is very marked. Dr. Todd put forward the supposition that the uterus might be regarded as "a source of rheumatic or arthritic matter." In

^{*} Edinburgh Medical Journal, May, 1858. † Eruptions: Their Real Nature and Rational Treatment.

the article "Rheumatism," in Copland's Medical Dictionary, Dr. Todd's idea is discarded, but it is suggested that "the imperfect discharge of the catamenial function and of the depurating process thereby produced may favour the development of either rheumatism or gout." To this explanation of the connection between uterine and rheumatic affections, Dr. Begbie opposed the shrewd remark that "this theory will not account for one of the most common complications of rheumatism with uterine disorder, that in which menstruation is excessive; nor will it account for another uterine disorder as associated with the rheumatic diathesis, that in which the depurating process of menstruation is performed, but performed with intense suffering;" and he added that he inclined to believe that the uterus was "affected in its functions and structure through the rheumatic blood." Even this explanation, however, does not remove the difficulty, as every one must have noticed that in many instances the rheumatic tendency is secondary to the uterine affection, and must in those instances be the effect of it rather than the cause. But I apprehend that all uterine inflammations have something of the rheumatic in them; and it seems to me that all rheumatisms are merely irritable or congested conditions of fibrous or muscular tissues, whereby the chemical changes in them take place more rapidly, or in a somewhat altered manner, throwing into the blood products of decomposition, which irritate other parts to which they are carried by the circulation; for it is pretty obvious that in rheumatism there is a materies morbi generated, whatever be its chemical nature, and while it is very possible that Dr. Prout's lactic acid hypothesis is true in certain sets of cases, it does seem probable from the variety of rheumatic affections, and the way in which some of them shade into gout, that the materies morbi is not the same in every instance, and that in many instances it is a product of the decomposition of nitrogenous matters. If these views have any considerable amount of truth in them, the explanation of the close connection of uterine affections with rheumatism is to be found simply in the fact of the uterus being a muscular and fibrous structure particularly susceptible of nutritive irritation, and the efficacy of arsenic in those affections is to be referred to the same cause, whatever it may be, which makes it efficacious in other rheumatic ailments.

In cases of lupus and palatal ulcerations, I have said that I have found arsenic to be very serviceable. Of these, the cases benefited have been those in which it was certain that there was no syphilitic taint. This seems curious enough, considering that arsenic has been praised as a remedy for syphilis; but the very circumstance that I was unprepared to find the fact to be as I have stated makes me the more certain that my statement is correct. I have long been convinced of the baneful effects of irritant and escharotic applications to lupus, and have used the treatment by means of cod-liver oil with excellent effect, both in pure lupus and in cases of lupoid ulceration with syphilitic taint; but it will be admitted that, in bad cases, cod-liver oil and attention to diet are not unaided always productive of cure; and what iodide of potassium is in syphilitic cases, that I find arsenic to be in cases non-syphilitic. In various instances I have seen the most marked improvement take place as soon as the physiological effects of arsenic have been established, and continue as long as the remedy was continued, till a complete cure was effected. I have mentioned palatal ulcerations along with lupus, because not only does true non-syphilitic lupus exedens sometimes affect the palate along with the nose, but one meets occasionally with precisely similar non-syphilitic palatal and pharyngeal ulcerations unaccompanied with any attack of the integument, and amenable to the same treatment as lupus. The transition from such cases to others in which a chronic fætid discharge from the nose is complained of, sometimes with thickening in the neighbourhood of the Eustachian tubes affecting the hearing, seems an easy one, although I take it that this condition is more frequently associated with a rheumatic than a strumous habit; and in this condition arsenic is serviceable in a very marked degree.

If now for a moment we review the physiological actions of arsenic, in the hope of their shedding some light on its therapeutic properties, we probably cannot have a better guide than the Memoir of M. Lolliot.* From experiments on dogs and rabbits, M. Lolliot concludes that "arsenic exhibits two fundamental properties: first, depression of temperature; secondly, diminution of the urea in the urine." He proceeds then to say, that "it is with justice that M. Sée has now ranged arsenic among the médicaments d'epargne, besides alcohol, coffee, &c.

^{*} Etude Physiologique de l'Arsenic. Paris, 1868.

Arsenic, according to M. Sée, owes this property to direct combination with the blood globules. This combination, according to him, is made at the expense of the oxygen, of which arsenic takes the place,—and the globules, deprived of their oxygen, are no longer fit to oxidize our tissues, and the denutrition of these is thus lessened. In fact, in the bodies of persons poisoned with arsenic it has been observed that the globules are conserved—that is, that they are preserved from decomposition in consequence of the want of oxygen. Arsenic prevents then the globules from being charged with oxygen in the lungs, and so renders them incapable of oxidizing the tissues; from this arrest of combustion results fatty metamorphosis of the organs." M. Lolliot is unable to find by experiments on animals any effect produced by arsenic on the respiration, and imputes the "singular property which arsenic possesses of rendering the respiration easier," which he considers demonstrated by observations on arsenic eaters, to the reduced denutrition of the tissues. So also in arsenicism, or slow poisoning with arsenic. the motor paralysis and somnolence produced, being accompanied, as they usually are, with emaciation, may, he thinks, be reasonably imputed to the imperfect nutrition of the brain and cord. He finds that arsenic is eliminated by the skin, mucous membranes, kidneys, and liver, and in large doses produces fatty degeneration of the liver and kidneys. From this account, even keeping the theoretical part of it out of view, it appears pretty plainly that it is unlikely that the therapeutic benefits of arsenic are due to elimination by promotion of the ordinary action of the emunctories. Particularly, it is unlikely that it promotes the elimination of a materies morbi by means of the kidney, when experiment demonstrates that it acts with certainty as a diminisher of the total amount of urea secreted in twenty-four hours. No doubt that diminution of urea depends most probably not on action on the kidney, but on the material, from which urea is formed, and it is quite possible that, although by that action the work thrown on the kidneys is diminished, the kidneys may yet have their efficiency increased in accomplishing the work which is left to them; and this seems the more probable, as the very irritation which in excess produces fatty degeneration might be expected when more moderate to stimulate the proper function. But it is noticeable that while arsenic diminishes the urea it does not seem to

increase the other ingredients of the urine, even though it is itself eliminated, at least in part, by the kidney. Neither is its action due to increase of the amount of intestinal secretion, for in those instances in which it is most efficacious there is no diarrhea whatever, and if that symptom should threaten, it is necessary immediately to take the hint and discontinue the exhibition of the remedy. Neither are the secretions of the skin increased so as to constitute arsenic a sudorific; and yet on integumentary surfaces a certain action is exercised of a very definite nature, as shown by three usual effects of medicinal doses,—the silvery tongue, plumpness of the face, and irritation of the conjunctiva. Of these, the silvery tongue described by Begbie is generally the first to appear, and I think I may say that I have never seen any therapeutic effect produced without the tongue having assumed the silvery appearance—an appearance due altogether to a change in the epithelium, probably to thickening of it, but certainly not produced by adherent deposit. The plumpness of the features, so far from arising from any œdematous condition, looks perfectly healthy, and is best marked when the remedy agrees with the patient. But the irritation of the conjunctiva is often absent, or is unobserved by the patient, although the therapeutic advantage sought has been gained. When it is present it is not a condition marked by increased secretion, but redness and a certain soreness, or "prickliness." I take it that all the three symptoms,—the silvery tongue, the plump appearance of the face, and the red conjunctiva,—are indications of one state of matters, injection of the superficial capillaries supplying nourishment to a rapid growth of epithelium.

We have now, I think, brought before us two very marked sets of physiological properties of arsenic in medicinal doses, not obviously connected one with the other: first, the arrest of processes of decomposition, as evinced in experiments on animals by diminished secretion of urea and reduction of temperature; secondly, increased nutrition of epithelial surfaces, as evinced by the phenomena we have just considered. The second set of properties might of themselves be supposed to furnish some explanation of the therapeutic benefits in cutaneous diseases, but it is on the first set of properties that we must fall back for an explanation of the benefits derived in rheumatic affections; and considering that the cutaneous affections are often connected with rheumatic habit, the beneficial effects on these are probably also derived in some measure from the first set of properties.

I have stated already why I think that the groups of affections associated with rheumatism and gout have probably all of them this in common, that the tissues are acted on by a poison in the blood, a product of denutrition, and that the poison is different in different sets of cases. I would further add that the group probably is divisible into two very different sets of cases: first, there are those in which only the normal amount of debris is thrown into the blood, but it fails to be sufficiently rapidly removed by the emunctories, and the question might be raised with regard to those, whether the emunctories are to blame or the debris of tissue has an abnormally slight tendency to decomposition; secondly, there are those in which debris of tissue is thrown too rapidly into the blood, from deficient elaboration of the substance of the tissues, rendering them prone to rapid decay; and possibly a third set of cases might be distinguished in which the emunctories have too much work thrown on them by overabundant new supplies of material being constantly thrown into the blood. In lithic diathesis, there can surely be little doubt of the truth of the distinctions now drawn: typical gout belongs to the first division now made, and I have no hesitation in believing that the cases marked by lithic diathesis in which arsenic does good belong to the second group. If this be the case, and we consider that arsenic circulating in the blood has the property of preventing processes of decomposition, we have a ready explanation of its benefits in those cases.

The circumstance that creosote and kindred antiseptic substances are of much use in some rheumatic affections would corroborate this view of the mode in which arsenic is beneficial, and so also would the consideration that those cutaneous diseases in which arsenic does good are those in which tarry and such like applications are of use. Tar in psoriasis, although applied to the surface, certainly must exert its influence, not on the superficial, but on the young strata of epithelial cells,—for it is only by a change in the young strata that the diseased superficial strata of epithelium can be replaced by healthy; and it is quite possible that the influence which it exerts on the young epithelium may consist in prevention of a too easy oxidation—in fact be of an antiseptic character. But it may be questioned

if any remedy combines like arsenic the property of preventing waste of tissue with that of fostering growth of epithelial textures.

NOTE ON DISEASED HAIR.

By F. V. Paxton, M.A., M.B., Oxon. Physician, Chichester Infirmary.

In the Journal of Cutaneous Medicine for July, 1869, I described a form of diseased hair not uncommon in the axilla, which I believed was due to a vegetable parasite. I was, however, at that time unable to make out the vegetable structure satisfactorily, owing to the immaturity of the specimens which I had then examined. I have since discovered specimens in a state of maturity, and they leave no doubt of the vegetable nature of the growth. The masses surrounding the hair are found to have increased in size, and to consist entirely of minute spore-like bodies. These are 14000 of an inch in diameter, and are developed in groups of four, so as to resemble minute sarcinæ.

I have learnt by the kindness of Dr. Godfrey, of Enfield, that this diseased condition of the hair has been described by Professor Hallier, of Jena, in his treatise, "Die Pflanzlichen Parasiten des Menschlichen Körpers," p. 95. Professor Hallier considers the masses to consist of threads of leptothrix, anastomosing so as to form a fine network. The arrangement appears to me to be rather a growth in the solid mass, and to be analogous to the consolidation of the threads of penicillium, known as coremium. The spores in the present case appear to be rather larger than those of leptothrix, and their development in groups of four is also different from the ordinary mode of growth in that plant.

ON CUTANEOUS DISEASES IN THE INSANE.

By Patrick Nicol, M.A., M.B.

O subject has of late been more closely studied than that of the nervous influence upon the capillaries of the skin and upon its nutrition generally, and results worthy of the zeal of the observers have been obtained. Both clinical and

experimental observations have shown that abnormal nerve currents can at the distal ends of the fibres rapidly produce appreciable changes, consisting primarily in exudation of an altered *liquor* through the fine walls, and secondarily in various modifications of the cuticle which show in some form through the epidermis, and claim a place for the affection among skin diseases.

It is, therefore, natural to expect that in the insane there should be some determination towards the skin of the perverted process of nervo-mental life. What precise degree of skin affection is looked for will depend on the extent to which each observer believes in the material theory of mind. To one who believes in mind as a something altogether transcending matter, it might seem little less than ridiculous to affirm that a ruined mind must often mean a ruined, or at least unhealthy skin; to another, who looks on mental life in its minutest phase as clenched with the nerve fibre and cell in indissoluble union, the outward course and manifestation of an unhealth of the mind in the lines of the nervous channels, even as far as the skin, might seem almost a necessary occurrence.

At the suggestion of Dr. H. S. Purdon, some observations relating to the clinical aspect of this connection are here put together, so as to give the general impressions conveyed by experience.

It may be confessed at once that the facts taken note of gave negative results as regards the better marked classes of skin affections; these did not appear in the patients examined more common than they would have been among the same number of sane persons. This was to be expected, for any connection between such diseases as impetigo, psoriasis, or molluscum, and lesions of mind, would have been observed long since if it had existed. These are affections in which the skin tissues play the main part; and it is most unlikely that any disturbance of the mental centres should be able to induce the thorough changes necessary for their development. Let us acknowledge to the fullest that mind is bound up with matter, and when we go among the insane we shall be compelled to acknowledge that between the tossings of the mind and the currents of vegetative life there is, as it were, some great breakwater interposed, so that the billows of the former are represented only by ripples of the latter, and not even the fact

of a direct ratio between the sizes of the two fluctuations can be established.

It is, therefore, by the finer, the more transient kinds of skin lesions, that the outward spread of the central mental commotion might be expected to be indicated, and to a certain extent the facts given below bear out such a conclusion.

When, however, leaving the affections that are sufficiently evident and persistent to be assigned separate names, we go to that large class of phenomena that may be called states of the skin simply (heat, cold, dryness, moistness, clamminess, harshness, &c.), the important rôle which these play in the pathology and in settling the principles of treatment of states of excitement in the insane, though little acknowledged, cannot, it seems to me, be much over-estimated. Take two patients:—both are restless, both talk almost constantly; the talking of both is probably equally senseless, but is enough to disturb the room, and point to something wrong in themselves; both have quick, small, tapping pulse; the tongues of both may be clean, the one perhaps a little more florid than the other; the conjunctive of both may be clear, but of one probably a little suffused and arterially injected; here there is little to make one choose a separate line of treatment for each. Give both morphia, and it will indeed drown for the time, probably, the sensibilities and ill-ordered volitions of both, and will moreover in the end prove equally injurious to general health in both,—or, if persisted in, become an excitant instead of a calmative. Let each have a couple of ounces of brandy; one will be quiet, or even asleep, in a short time the other will probably be rendered wild; give each an hour in the wet sheet, as a diaphoretic, and the former will be released with his noisiness confirmed for days, the latter will probably settle down in a state of perhaps confessed relief. How are the two to be distinguished for treatment? The skin of the one is cold and clammy; the skin of the other is warm or even hot, and it may be, evidently hyperæmic. The former is the one benefited by the brandy; the latter the one that gains by the mild application of wet sheet packing.

But, to return from this question of the value to the alienist physician of states of the skin, the results of observations as to the frequency of skin affections among the insane may be now brought forward. These observations were made in an asylum containing about 670 patients;* and, it should be added, as having a material influence on the health of the patients' skins, that the house is airily situated and thoroughly ventilated, that washing and bathing are well attended to, and that the diet is good. Under these circumstances, it is not wonderful that the common skin diseases of the sane, encouraged often by neglect of these very particulars, should not find a footing.

During the spring months, March, April, May, and the early part of June, forty-eight cases of skin affection appeared worthy of note and treatment—viz., twenty-one among the men and twenty-seven among the women, to which may be added thirteen cases of boils (one or more) in men, and one case in a woman. On the male side the affections, ranged in order of frequency, were—Pemphigoid bullæ (generally on fingers or feet); eczema; erysipelas, prurigo, acne, impetigo (two cases each); chronic hyperæmia of skin, erythema, psoriasis guttata, purpura, sanguineous heel of the insane (one case each). On the female side there were found eczema; hyperæmia of scalp, pemphigoid bullæ; impetigo; erythema, erysipelas, herpes, prurigo (two cases each); roseola, psoriasis, lichen (one case each).

The remark is obvious, that these names bring home to us conditions of partial temporary congestions of skin, more or less productive of structural defects, rather than well-marked and mainly structural affections, running a definite course. And the examination of the cases favoured still more this impression; the common feature of local congestion was more prominent than the specific lesion, whether papule, vesicle, or pustule that might follow. Eleven of the men and ten of the women were more or less the subjects of excitement about the time when the skin affection appeared.

In the month of September the skin of every male patient was examined, when it was found that about twenty-five, out of 343, were affected with slight acne, prurigo, &c., or with local or general hyperæmia of skin. In thirty-one there were skin lesions present, the cases not included in the twenty-five

^{*} The Sussex County Asylum. The cases were observed by the kind permission of Dr. S. W. D. Williams, superintendent. In regard to female patients, much is owed to the assistance of the able head attendant, Miss Buckle.

being remains of syphilitic eruptions and pigmentary spots. In the cases of the twenty-five there were found patches of congestion (mostly passive) in one surrounding papules with heads scratched or pinched off, in another surrounding pustules, in still another blebs, and so on, but only in a few to so marked an extent that the medical officer's attention had been called to them. A curious condition—viz., the ordinary goose's skin, but with each little prominence of a bright pink colour, was noticed in several men as the effect of washing. These twenty-five patients were nearly all more or less demented.

At the same time it was ascertained that of about 350 female patients then in the house, seventy-eight were more or less subject to skin disease of some sort, principally however to "pimply rash" (often an imperfectly developed acne, but best comparable to the bromide of potassium rash, only not so apt to appear on the face.) Of the seventy-eight, about ten were rational on most subjects (cases of partial ideational insanity), sixteen were more or less liable to excitement, and the others were more or less demented.

These details are of a heterogeneous nature; but they may serve to convey some idea of the nature and frequency of skin lesions in the insane of one county. I shall conclude with some remarks on special cases of interest, and on congestions of the auricle.

H—— B——, a stout, oldish, thick-featured man, a Hebrew, the subject of chronic excitement, exhibited in continual talking and thumping with his feet. Has chronic hyperæmia of skin, and, except in deep winter, almost chronic perspiration. Considerable improvement (temporarily at least) from Liq. Arsenicalis, to an extent short of producing congestion of eyes.

J— H—, a young man, with congenital weakness of mind, and recurring attacks of religious-melancholic excitement. Just at the beginning of a most severe attack, extensive ecchymosis beneath both conjunctive occurred; careful inquiry elicited no external cause. Whole skin flushed at the same time. Knuckles may have been crammed into eyes during prayer; but he denies this, and he is very truthful.

W——N——, middle-aged man—Prolonged inania, following blow on head; gradually sank exhausted. A few days before death a patch of sanguineous effusion on either heel appeared.

E- W-, a tall, thin, rather sallow woman-melan-

cholic, believing herself bewitched. Complains much of "pricking and shooting" pain in her head. Decided hyperæmia of scalp; retinæ much congested. Improvement of head symptoms, and temporarily of general state under assiduous application of spirit lotion to scalp.

E— V—, a young man, with subacute mania—On admission, friction or pressure on the skin, otherwise than the gentlest, produces a bright pink mark, approaching a wheal.

W—— C——, an oldish man, semi-demented, very suspicious of all interference with himself, and given to that aimless resistance to every attempt to move any part of his body, which is found often in similar patients, was found, at a time when these symptoms were more conspicuous than usual, to have a well-marked purpuraceous rash on the front aspect of both legs. No cause known, farther than the super-addition of an accession of excitement to the decayed state of all nerve power. Urine free from blood or albumen.

The sanguineous tumor of the ear of the insane (hæmatoma auris) has been previously* referred partly to excitement or the lesion of nerve consequent on it, partly to mechanical affection of the auricle, such as a blow, or the pressure on the ear by lying on the side in bed. The following facts, though relating to passing congestions of the ear, have a bearing on the production of hæmatoma:—

D—— C——, middle-aged, was the subject of melancholia with excitement; ate very little for some time; had an attack of pneumonia. During the course of this last, it was noticed that the left ear, when he lay on it, became frequently of a pink colour; it was once seen to be bright purple, and in striking contrast to the opposite ear.

Following on this, some observations of the state of the two auricles were made on about twenty patients after they had been about an hour in bed. The data are very imperfect, but it may be said that in every case there was a sensible difference between the one ear and the other, in colour, in warmth, or in moistness, and in most of the cases in all three. The patients examined were demented or epileptic.

J—— H——, an old and feeble man, while in a state of excitement got a kick on the ear from a fellow-patient. This was followed by extensive ecchymosis, and considerable con-

^{*} British and Foreign Medico-Chirurgical Review for July, 1870.

gestion and thickening of the auricle, but not by hæmatoma, though all the conditions seemed present. When excited, this old man was little in the recumbent posture.

Though no conclusion can be drawn from so few facts, the mere *pressure* element in the causation of hæmatoma seems to gain importance from them.

Note.—The materials for the following fuller table were not at hand when the above was written:—

	otal Cas	es j	fron	n Mar	ch	to Septembe	r inclusi	ve.		
M E N.				WOMEN.						
Furunculi			15	cases.		Furunculi	• •		3	cases.
Pemphigus			7	,,		Eczema		• •	7	9 9
Prurigo			5	,,		Erythema	• •		6	,,
Erythema			4	,,		Erysipelas			5	,,
Erysipelas			3	2.5		Prurigo	• •		4	,,
Eczema			3	,,		Hyperæmia	of Scalp		3	,,
Impetigo, Ac	ene, each		2	,,		Impetigo	• •		3	,,
Purpura, Sanguineous heel,					Pemphigus			3	22	
Psoriasis, Chr. hyperæmia,					Herpes	• •			,,	
	· -	eacl		11		Psoriasis				9.9
						Lichen			1	27
										77

BRIEF HISTORICAL SKETCH OF DERMATOLOGY, CLASSIFICATION OF SKIN DISEASES, GENERAL REMARKS ON THE ANATOMY OF THE SKIN.*

By H. S. Purdon, M.D., Physician to the General and Skin Hospitals, Belfast.

IT is my business on the present occasion to offer a few preliminary remarks relating more especially to the study of cutaneous diseases. I might be very diffuse in my treatment of this subject; but, considering the knowledge which you must have already attained in the prosecution of your professional studies, I think it better to bring the matter before you in the spirit of Sterne's precept—"That the truest respect which you can pay to the hearer's understanding is to halve this matter amicably, and leave him something to imagine in his turn as well as yourself;" and in the meantime I bid you "Ceade mille failthe."

Nature has been divided into the animal, vegetable, and mineral kingdoms. It is with the first two of these divisions

^{*} Abstract of Lecture.

that the student of pathology has to deal. Here do we meet with those phenomena of suspended or perverted functions, characterised by the common name of disease. The chemical and mechanical changes of the mineral kingdom do not directly fall under our notice. We may have to study them, it is true, but it is only as they are subservient or related to the maladies and affections of organic structures. Now, in commencing this course of lectures, it may first be necessary to give a brief historical sketch of Dermatology.

Hippocrates divided cutaneous diseases into local and constitutional. Galen classified them according to their situation, viz., into those affecting the head and those affecting the body. Many skin diseases were described by the Greek and Arabian physicians, and some of the terms still in use are those that have been adopted by Hippocrates, Celsus, and the celebrated Arabian physician Avicenna. During the early part of the 17th century Hafenreffer published a rude classification, which was followed by another from Jerome Mercurialis, an Italian physician. Turner was the next writer, and in 1736 published a "Treatise on Diseases incident to the Skin," this writer's classification being grounded on diseases produced by internal and external causes. Lorry modified this arrangement, and was followed about 1790 by Retz. The next author was Plenck, who classified skin diseases, according to their external appearances, the groundwork of Willan's subsequent arrangement.

In 1804, Derier divided these diseases into essential and symptomatic, but we must give to Willan the credit of arranging Plenck's artificial system to a tangible form. Now, Willan's classification, which is based on the primitive forms of cutaneous eruptions is extremely simple, although naturally imperfect: diseases having no connexion whatever, except in external appearances, are frequently grouped together; as, for example, we have scabies in the same order as variola. Again, the eruption may change its nature and character in its development, as when a vesicle by augmentation of inflammation becomes thickened and hard at its base, beginning to be white and opaque, instead of containing a clear fluid, thus being transformed into a pustule. About the year 1819, Bateman adopted Willan's arrangement and edited his published works.

Mr. Plumbe, in 1824, made a step in the right direction, and classified skin diseases according to the morbid anatomy of the

affected parts. Dermatology found, however, in M. le Baron Alibert one capable of elevating it to a proper station. This dermatologist arranged cutaneous diseases into natural families, of which he founded twelve—as eczémateuses, exanthémateuses, teigneuses, dartréuses, cancéreuses, lépreuses, veroléuses, struménuses, scabiéuses, hæmatéuses, dyschromateuses, and hétéromorphes. In this classification Alibert copied Linnæus and other botanists in their arrangement of natural history. In the family eczémateuses, all diseases related to eczema are contained. Rayer's classification was based on that of Willan; he made, however, several improvements in the arrangements of the genera, but included affections such as neuralgia, cyanosis, &c. In the work of Cazenave, the classification of Willan is more strictly adhered to.

Hardy, of S. Louis Hospital, has given us a classification, in which he divides skin diseases into-1st, macules and deformities; 2nd, inflammations; 3rd, parasitic diseases; 4th, eruptive fevers; 5th, symptomatic eruptions; 6th, dartres, or tetters; 7th, scrofulides; 8th, syphilides; 9th, cancers; 10th, exotic diseases. This last includes those affections which do not occur in France, and the "dartres" contains eczema, psoriasis, lichen, and pityriasis. Hebra's arrangement is founded on the pathological phenomena exhibited: the following are the most important groups, viz., hyperæmias, anæmias, hypertrophies, atrophies, &c. Baumes, in 1842, published a classification in which he repudiates pathological facts altogether. Mr. Wilson's clinical classification is also excellent, and well known to you. Bazin divides skin diseases into two grand divisions:—diseases in the course of evolution, and those arrested in evolution. The late Dr. Buchanan,* of Glasgow, has arranged these diseases as follows:-

B—Syphilitic Eruptions.
C—Febrile Eruptions.

^{*} See Edinburgh Medical Journal, January, 1864.

This classification is the one we shall adopt, only adding to it a group containing neuroses of the skin.

Much aid towards diagnosis, also valuable pathological information, have been gained by the microscope; for instance, the discovery of a cryptogamic plant, in certain skin affections.

Many cutaneous diseases cause very little constitutional derangement; and as long as an individual remains unaffected with any acute inflammatory affection, the existence of an ordinary skin disease will not in any respect diminish the average chances of longevity. This fact is of importance in examining patients for Insurance Companies.

The cutaneous covering of our bodies performs various functions important to health, and which are treated of in works on Physiology. It differs in the animal creation, being in the armadillo and shark, for instance, strong, thick, and answering to a coat of mail. In the horse, and animals of a similar kind, it is of a firm texture, and called the hide. Breschét was one of the first to investigate the minute structure of the skin in a scientific manner. We find it varies in thickness and consistence in different regions, and is freely supplied by blood-vessels, nerves, and lymphatics, together with sebaceous and sudoriparous glands. The rete-mucosum is situated between the true skin and cuticle; deeper still we have a layer of subcutaneous cellular tissue. The pathology of this is very interesting, for in various diseases an exudation takes place into this structure—as, for instance, in eczema. Moreover it may be the seat of furunculi and various kinds of tumours. This subcutaneous infiltration may be due to nerve irritation arising from either local or constitutional causes, said to be owing to direct transudation from the capillary vessels; for, according to Bernard, the cerebro-spinal nerves cause dilatation of the capillaries—the sympathetic, on the other hand, have an opposite influence; and if these two functions are not equally balanced, transudation occurs. Cell growth likewise depends in a great measure upon the nature and intensity of the exciting cause, and in eczema there is capillary congestion with cell-proliferation. We observe, then, that if the healthy functions of a part are disturbed from various causes, there ensues a train of symptoms described as follows: -- Congestion, increased temperature in the affected part, escape of fluid from the vessels, giving rise to various elementary lesions as vesicles, or when the exudation is plastic papules. These lesions generally appear at the orifices

of hair-follicles, gland ducts, or other vascular points; or, following the distribution of particular nerves, vesicles may arise. Herpes and pemphigus form the connecting link between erythema on the one hand and urticaria on the other. These states are due in a great measure to derangement of the vaso-motor nerves, which control the flow of blood and the vital actions of the different parts: redness of the skin being due to arrested or embarrassed circulation, the capillary layer of the cutis being involved. That this is the case is proved by many facts. The continued contraction of the blood-vessels, owing to vaso-motor nerve spasm, being occasionally the cause of a gangrenous condition of the skin, which is often referred to a blood disorder.

The pathological state called inflammation is attended with hyperæmia, which cannot co-exist with healthy nutrition of the tissues—as, for example, the skin. The blood must also be in proper quantity and quality, the chief relation of the capillaries to textural growth being merely ministerial. Again, what has been termed "functional reaction" of the tissue cells may eventually lead to hypertrophy and hyperplasia, or when excessive to degeneration, and even death of the part affected. The new current of opinion, as stated by a recent writer,* has brought us only a doctrine of suppuration, and forced upon us the following alternative:—We must either return to the old views, allowing the inflammatory process to have terminated with the action of the vessels, and cease to talk any more of an inflammation of non-vascular tissues, or we must not do this, but place the clinical idea—according to which suppuration is a consequence of inflammation—upside down, and derive inflammation from suppuration. We shall commence the study of diseases of the skin with the inflammatory group.

THE LEPROSY IN OLDEN TIMES IN GLASGOW.

BY THE REV. J. F. S. GORDON, D.D.

THE founder of the Leper Hospital in Glasgow was Marjory Stewart, the legitimate daughter of Robert, Duke of Albany, son of King Robert the Second. She married early in life Duncan Campbell, Lord Lochow, and became the mother of Archibald, whose son, Colin, was afterwards known to the world as the first Earl of Argyle.

^{*} American Journal of Medical Science.

What led this lady first to settle in Glasgow, can now be only explained by the fact of the city being at that time, next to St. Andrews, the principal seat of ecclesiastical learning in Scotland, and therefore a place well suited to her religious disposition. After her settlement in the town, she acquired that whole space of ground on which the Bridgegate is now built, in those days known by the name of Fishergate; and not long after, she made an addition to her property by her acquisition of that portion of land on the South bank of Clyde, stretching from the Old Bridge on the west, to the (at that time) pleasant rivulet called the Blind Burn on the east. This space of ground she denominated St. Ninian's Croft.

At the time of which we speak, the disease of leprosy was by no means uncommon on the Continent of Europe; and although, at the present day, it is almost completely unknown as a native endemic in any part of our quarter of the globe, yet from the 10th to the 16th century it prevailed in nearly every district of it. Laws were enacted by princes and courts to arrest its diffusion; the Pope issued bulls with regard to the ecclesiastical separation and rights of the infected; a particular order of knighthood was instituted to watch over the sick; and leper hospitals, or lazar-houses, were everywhere founded to receive the victims of the disease. Indeed, when we examine the old records of any of the towns of Great Britain, in almost every case we will find some enactment with regard to leprosy.

Regarding, however, the first appearance of the disease in Great Britain and Western Europe generally, there has been much conflict of opinion. Some authors have averred that it was introduced from the East by those who returned from the Crusades, and that by this means it first reached Great Britain. It is quite possible that through the increased international intercourse of that period it may have been propagated more rapidly and widely than would otherwise have occurred; but there are ample reasons and proofs for believing that it existed on the Continent of Europe, and even as far westward as England, before the Crusade fanaticism had drawn any converts from this country. The first relay of Englishmen engaged in the Crusades left in 1096, and returned two years afterwards.

At or about what time the malady in question first made its appearance in Glasgow, no records now inform us; but from the fact of the Leper Hospital having been founded in the year

1350, in the reign of David II. it would appear that at least previous to that time its ravages had not been confined to a very limited range. The benevolent foundress of the Institution had seen with an eye at once of wisdom and commiseration the benefits which the public, and the affected themselves, would derive from such an Institution; and accordingly, since her whole by-past life had been spent in healing the sick and comforting the broken-hearted, she crowned her benevolent actions by building an hospital on St. Ninian's Croft, "for the use and behoof" of individuals infected with leprosy, which she ordained in all time coming to be called St. Ninian's Hospital. The exact site of the hospital and its adjuncts, at the present day, is understood to have been near the brink of the river Clyde, on a space of ground extending from the foot of Muirhead Street, by the bottom of St. Ninian Street, to the foot of Hospital Street, the two latter of which are so named with reference to the ancient existence of the Institution: - Hospital Street, from the building having stood in that locality—St. Ninian Street, from that having been the title of its tutelary saint.

Lady Lochow, for the support of this Leper Hospital, obliged all builders of houses on her grounds of Bridgegate and St. Ninian's Croft to pay a feu duty, to be devoted to that purpose. The great-grandfather of the garrulous historian of the city, M'Ure, according to the latter's own account, was the last preceptor of this hospital, employed by the family of Argyle for the uplifting the feu duties of the Bridgegate and St. Ninian's Croft, for the use and behoof of the poor persons residing therein afflicted with leprosy. A statue of the foundress stood anciently in front of the building. When the magistrates and council of the city, however, became proprietors of the Barony of Gorbals, they feued the ground on which the hospital and its adjuncts were situated to several individuals, one of whom, probably some pious Covenanter, devoutly detesting any relic of Popery, defaced the effigy, and made a lintel of the stone.

The magistrates of the city seem to have exercised the privilege both of searching for lepers among the inhabitants, and of consigning them this to hospital. From a work entitled "Burgh Records of Glasgow," (being a reprint of these documents from 1573 to 1581,) presented in 1832 by Dr. Smith to the Maitland Club, it appears, that between these years the magistrates ordained four persons, named as lepers, "to be

viseit, and gif they be found so, to be secludit of the town to the hospital at the Brigend." A similar edict was issued in regard to two other individuals, in 1575; and in 1581, eight more seem to have been dealt with in the same manner. The bishops of Glasgow appear also to have had a right to present patients to the hospital. In 1404, Andrew Muirhead, who then held the bishoprick, availed himself of the privilege, by presenting one patient. Lepers were compelled by other reasons than mere custom or common law, to retire from society. They were of necessity driven to seek the asylum of the lazar hospitals, in consequence of the statutes, both of the general country and of local communities, prohibiting every citizen from retaining a person labouring under leprosy in his house, and preventing the infected from entering within the gates of the city.

The old Scottish "Burrow Lawes" have stringent clauses upon this head, for they hold that "na man should presume, or be so bauld, as to harberie or ludge ane lipperman within the burgh under ane full amerciament." And, further—"Lippermen sall not enter within the towne, but in passing throw it, and sall not gang fra dure to dure, but sall sit at the ports of the burgh, and sall seek almes fra them that passes in and comes furth."

The dress of the inmates of St. Ninian's Hospital was similar to that of the lazars of any other Institution. They were a tunic or gown of russet, with a hood, and sleeves closed to the tips of the fingers, but not laced, with knots or thread after the secular fashion. Thus apparelled, the wretched leper trudged along, rattling his clappers, as if to proclaim—"Unclean! unclean!" The principal subsistence of the lepers seems to have been derived from casual alms. Each of the doomed inmates of the hospitals was, like the leper-struck heroine of the old Scottish poet, Henryson, by—

"Cauld and hunger sair, Compellit to be ane rank beggair."

The inmates of the Brigend Hospital were allowed a certain sum per week, and for the remainder of their subsistence they were, according to the Brigend rules of the Institution, obliged to have recourse to begging. Notwithstanding the "Burrow Law" just cited, the lepers seem to have been allowed the liberty of entry into some towns, provided they used their clappers, to advertise the passing inhabitants of their presence, and thus allowed them to shun the supposed danger of their contact. The magistrates of Glasgow made the carrying of clappers one of the conditions on which they admitted the occasional entrance of the inmates of the Brigend Hospital into the city, one of their edicts for October, 1610, running thus:—"It is statut and ordanit that the lipper of the hospital sall gang (walk) only on the calsie (street) syde near the gutter, and sall haif clapperis and ane claith upoun their mouth and face, and sall stand afar off quhill they resaif almous, or answer under the payne of banischeing them from the toun and hospital."

The malady, it would appear, was not confined entirely to one class of people, but sometimes attacked the highest as well as the lowest. Nay, royalty itself was not exempt from its ravages, as in the well-authenticated case of our own King, Robert Bruce, who, after labouring under the disease from an early period of his life, fell a victim to its power, in the fiftysixth year of his age. It seems, however, to have had its largest share of victims in the lower classes of society,—amongst the "villeyns" or bondsmen of these times, and the poorer peasantry and burgesses, who, when shut up in the hospitals. were obliged either to depend upon the funds of these Institutions, or to beg for their support. The exact trade and calling of the individuals admitted into the different leper hospitals of the country can only be very imperfectly gathered from one or two casual records; but while this is a subject of regret with regard to these Institutions in general, it does not apply so particularly to the Leper Hospital of Glasgow. Amongst those citizens who were at different times, in the latter part of the 16th century, ordered by the magistrates to be visited, under the suspicion of labouring under leprosy, most are recorded by their mere Christian name and surname; but two or three are entered in the burgh records in such terms as to show their occupation and probable rank, as Robert ----, flesher, in 1573; Mr. James —, flesher; Patrick Bogle, maltman; and "Andrew Lawson, merchant," in 1581. One of these individuals is reported by the water-baillies as confined in the Glasgow Leper Hospital, at the Brigend, in 1589, along with five other lepers. The whole list is interesting: viz., "Andro Lawson, merchand; Stevin Gilmore, cordiner; Robert Bogle, son to Patrick Bogle; Patrick Birstall, tailzeour; Johne Thomsoun, sone to Johne Thomsoun, tailzeour; Daniel Cunninghame, tinclar."

Few facts in the history of tubercular leprosy seem to be more universally admitted by all writers on the disease, both ancient and modern, than the trasmission of the predisposition to it from father to offspring. Amid the scattered fragments relative to the former history of leprosy in our own city, it can scarcely be expected that we should have many individual data bearing directly upon the transmission of the disease from father to son. Yet we have one instance of it in the cases just cited, where, in 1581, "Patrick Bogle," is ordered to be inspected for leprosy, and fifteen years after Robert Bogle, son to Patrick Bogle, is reported as an inmate of the leper house belonging to the city.

It is not to be supposed that St. Ninian's Leper Hospital, or indeed any of the other hospitals which then existed for the reception of leprous patients, were intended as places where a cure of the disease was to be attempted. They were charitable and hygienic rather than medical Institutions. At that time, and up to the present day, tubercular leprosy was regarded as a disease which sets at defiance all the powers of the medical art. Its existing causes no one has ever been able satisfactorily to demonstrate, consequently remedies have been applied without knowledge. The frequency of the disease in former times has been confidently ascribed by different authors to peculiarities in the diet, dress, personal and domestic habits of their forefathers. When butchers slew cattle on the streets, and the proprietors or tenants of houses had dungsteads at their very thresholds, the prevalence of disease, to be sure, is not to be wondered at. But at the same time it would be no easy matter to point out the exact differences in those physical conditions of the inhabitants of this country, in former and modern times, which may have led to the prevalence of the disease amongst our ancestors, and to its disappearance amongst us. If poverty in diet, or personal wants, and filth and wretchedness in their deepest degrees, could generate the malady, there are certainly still numerous localities in Glasgow and other cities where, unfortunately, all those elements of disease are, in our own day, in full and active operation, without any such specific result following.

Individuals stricken with leprosy were sometimes looked upon by the superstitious spirit of the age as persons directly smitten by the hand of God; and we find in history traces of rich and noble, and even of royal devotees, endeavouring to expiate their sins, and propitiate the good-will of Heaven, by occasionally devoting themselves, and that with perfect impunity, to such duties to the sick as offered the most certain means of calling down the disease upon their own bodies, provided it had been at all so contagious as was generally supposed.

But from this it is not to be imagined that the victims of the malady were looked upon by the general community with feelings of devotion and pious commiseration. On the contrary the subjects of this "most vile of all diseases," were, as a body, regarded alike by the Church and by the people as objects of disgust. The canons of the Church of Scotland, as drawn up in the thirteenth century, deal with the unfortunate lepers more humanely than most other ecclesiastical judicatories; for after recommending them to be admonished to respect the churches of their districts, it is added, that if they cannot be induced to do so, let no coercion be employed, seeing that affliction should not be accumulated upon the afflicted, but rather their miseries commiserated. But the contempt displayed towards them seems to have been almost proverbial, so late as the age of Elizabeth. Thus Shakspeare makes Margaret of Anjou exclaim to the afflicted and suspicious Henry VI., after the murder of his uncle, the Duke of Gloucester,-" Why dost thou turn away and hide thy face? I am no loathsome leper: look on me." According to the tenor of various old civil codes and local enactments, when a person became affected with leprosy, he was looked upon as legally and politically dead, and lost the privileges belonging to his right of citizenship. By the laws of England, lepers were classed with idiots, madmen, outlaws, &c., as incapable of being heirs. But it was not by the eye of the law alone that the affected was looked upon as defunct, for the Church also took the same view, and performed the solemn ceremonials of the burial of the dead over him, on the day on which he was separated from his fellow-creatures, and confined to a lazar-house The various forms and ceremonies which were gone through on this occasion are described by French authors; but it is highly probable that the same observances were common in our own country, and therefore adhered to in the Leper Hospital of the Brigend.

A priest, robed with surplice and stole, went with the cross to

the house of the doomed leper. The minister of the church began the necessary ceremonies, by exhorting him to suffer, with a patient and penitent spirit, the incurable plague with which God had stricken him. He then sprinkled the unfortunate leper with holy water and afterwards conducted him to the church, the usual burial services being sung during their march thither. In the church, the ordinary habiliments of the leper were removed; he was clothed in a funeral pall, and while placed before the altar, between two trestles, the Libera was sung, and the mass for the dead celebrated over him. After this service he was again sprinkled with holy water, and led from the church to the house or hospital destined for his future abode. A pair of clappers, a barrel, a stick, cowl, and dress, &c., were given him. Before leaving the leper, the priest solemnly interdicted him from appearing in public without his leper's garb,—from entering inns, churches, mills, and bakehouses,-from touching children, or giving them ought he had touched,—from washing his hands, or any thing pertaining to him, in the common fountains and streams,—from touching in the markets the goods he wished to buy with any thing except his stick,—from eating and drinking with any others than lepers,—and he specially forbade him from walking in narrow paths, or from answering those who spoke to him in roads and streets, unless in a whisper, that they might not be annoyed with his pestilent breath, and with the infectious odour that exhaled from his body,—and last of all, before taking his departure, and leaving the leper for ever to the seclusion of the lazar-house, the official of the church terminated the ceremony of his separation from his living fellow-creatures, by throwing upon the body of the poor outcast a shovelful of earth, in imitation of the closure of the grave.

According to the then customary usage, leper hospitals were always provided with a cemetery for the reception of the bodies of those who had died of the malady.

The present writer has conversed with an old lady, whose mother remembered, on foundations being dug for the erection of several houses in Muirhead Street, of bones and parts of coffins being thrown up. That these were the remains of those unfortunates, who in life had been separated from their fellow-beings, and whose bones in death were not permitted a resting-place by the side of their ancestors, we can have no reason to doubt. The feelings naturally excited by the contemplation of such a

spot, are in a great measure dispelled by the bustle which, at the present day, surrounds it on all sides, so strikingly contrasted with the silence which must at one time have enshronded it. What a change has taken place! The common on which the leper was once doomed to live and die, and whose sod, when all his calamities were over, covered his body from human sight, is now occupied by power-loom factories!

NOTE BY DR. GORDON.

- 1. The Monks of Melrose had an hospital at Adingston, in the upper part of Lauderdale, for their sick brethren, they being at that time much afflicted with leprosy.
- 2. There was an hospital for lepers at Haddington, dedicated to S. Lawrence, 1532.
- 3. There was an hospital for lepers at Aldcamus, Berwickshire, during the 12th century. William the Lion gave a grant to it.
- 4. There was an hospital for lepers at Kincase, near Ayr, founded by King Robert the Bruce, for eight leprous persons, who were to have eight bolls of meal and eight merks Scots yearly. King Robert is said to have originated this charity, because he was cured of an eruptive disease of the nature of Leprosy (brought on by his ardnous struggles and fatigue), by drinking of the waters of Kincase well.

[To the above list we may add the following taken from Neligan's work on "Diseases of the Skin," edited by (now the Reverend) T. W. Belcher, M.D., page 316:—Leper hospital of S. Giles, Norwich, for eight bed-ridden lepers; also an hospital at Illeford, Essex, S. Julian's, S. Alban's, and Sherburne, near Durham, built by Bishop Pudsey, in 1181. In Dublin, Cork, Waterford, Wexford, Limerick, &c., leper hospitals were to be found.—Ed.]

A FEW NOTES ON PSORIASIS.

By William Wilson, M.D., M.Ch., Q.U.I., LATE ASSISTANT-SURGEON ABERSYCHAN IRON WORKS.

AST winter, while acting as Assistant-Surgeon to the Abersychan Iron Works, in South Wales, I was much struck with the number of cases of psoriasis which occurred among the puddlers connected with the works. These men, from the peculiar nature of their occupation, are much exposed to great and sudden changes of temperature. Labouring as they do during the entire day in the fiery heat of the furnaces, and then having to "trudge" home in the cold night air, must be very trying to the strongest constitution, and peculiarly so to men who for the most part take as little care of themselves as labourers in iron works generally do.

When the men who were afflicted with psoriasis applied to me for advice, they stated that they believed the disease to be caused by the changes of temperature to which they were exposed. I felt inclined to place some credit on the truth of this statement, as I noticed there were, comparatively speaking, but few cases among the workmen engaged in other departments of the works, whose occupations did not necessitate exposure to such extreme degrees of heat as did that of the puddlers.

That an abnormal stimulus like heat will predispose the skin to take on a disease like psoriasis is a highly tenable idea; for, when we consider the pathology of the affection, we find that it is often dependent on a disordered action of the capillary vessels. What is more likely to interfere with the healthy maintenance of a part than the constant irritation of an unnatural stimulus, such as heat? The capillaries become unduly dilated, and you have hyperemia of the cutis; that is, you have a greater supply of blood to a structure than is necessary for its nutrition. This state of matters would be favourable to healthy hypertrophy were the part to be nourished in a healthy state; but it is not—it is unduly irritated. Impaired in structure, and its nerves rendered hyperæsthetic by a stimulus morbid from its duration and intensity, the skin cannot but take on diseased action, unless the vital power of the constitution be sufficient to resist it. The peculiar form of disease which the skin assumes in the case of these robust, muscular men is psoriasis, just as in weak, debilitated people, and from the action of the same stimulus you have eczema. Although produced by the same cause, eczema seems to differ from psoriasis, in that it requires an entirely different condition of the system for the development of the former than it does for the latter.

Concluding these few introductory remarks, I shall append one or two cases:—

John H——, æt. 38, married, by occupation a puddler, applied to me for advice in March last. He was a thick-set, muscular man, and had a healthy appearance. He stated that a "rash" had broken out on his arms and back, and that the back gave him considerable annoyance through its extreme itchiness; first observed it coming out about six months ago, and had sought medical advice various times, but found no relief. Was rubbing Holloway's ointment into the rash now; was accustomed to take large quantities of beer. On examination, I found his arms covered with patches of psoriasis as far up as the shoulders. The patches were more abundant on the back of his arms and his elbows. A few small patches

(psoriasis nummularis) were on the aspect of flexion of both arms. Patches as large as the palm of the hand, and in close juxtaposition to each other (psoriasis diffusa) covered his back, from the inferior angles of the scapulæ down to the crests of the ossa innominatæ. A few spots (P. guttata) were beginning to appear about his buttocks.

As there was an appearance of bilateral symmetry about the affection, I questioned him as to whether he ever had syphilis or no; but he protested against having acquired any venereal disease whatever at any time. Tongue somewhat foul; bowels constipated; urine high-coloured. Ordered him a saline purgative mixture, to be taken three times a day till the bowels were freely opened, and then to leave it off.

Came the day following but one. Tongue now clean; bowels acting well; urine a great deal lighter in colour. Had left off drinking, and was confining himself to a pint of homebrewed ale in the day. The patches on the arms and back were covered with white silvery scales; no inflammatory redness about them, with the exception of one or two patches about the lower part of the back. Ordered the following mixture:—

R. Liq. Arsenicalis, mxxxvj.
Infusi Calumbæ, 3vj.
Sig. 3ss ter in die.

He was ordered to take this mixture immediately after food; also, to rub Hebra's tincture (equal parts of black soap, tar, and methylated spirit) into his arms and back, with a piece of flannel; to call back when his bottle was done. Came to me in four days; was altogether free from itch, and the patches were beginning to clear up in the centre; skin something softer, and more pliant; felt a slight pain in his stomach on the second day after taking the medicine, but was not troubled since; tongue clean; bowels regular; urine normal.

To increase the arsenic from three to five drops three times a day; to continue the use of Hebra's tincture; directed him to wash thoroughly with warm water and black soap, so as to remove as much as possible of the nightly application before he renewed the application of the tincture in the morning. This treatment was persevered in for another fortnight; at the end of that time the scaliness had altogether disappeared from his arms, the extent of the patches was greatly reduced, they were

level now with the surrounding skin; scaliness had almost altogether disappeared from the back.

This case proceeded in a most satisfactory manner for the next three weeks, the skin gradually recovering its elastic pliancy, and all trace of the disease, with the exception of the pigment staining, mapping out the position formerly held by the patches, rapidly disappearing. He requested me to allow him to leave off coming, as he felt now all right as regarded the "rash." As he suffered slightly from weakness and debility, probably from prolonged use of arsenic, the following mixture was prescribed:—

Ŗ	Ferri et Quin. Cit.	• • •	 	3j.
	Potas. Acetatis	• • •	 	зij.
	Infusi Quas.		 	₹vj.

Sig. 3 ss ter in die una hora post cibum.

Met him a month afterwards; was quite strong and healthy, and had no return of the disease.

During the progress of the above case arsenical symptoms were strictly attended to, and the dose was lowered when required.

ON CHRONIC URTICARIA.

By Edward Long Fox, M.D., Oxon., M.R.C.P.L., Physician Bristol Royal Infirmary.

IT is now quite ten years ago since Professor Scanzoni invited the attention of the profession to some cases of acute urticaria set up by the application of leeches to the cervix uteri.

Cases are not unfrequently met with in which urticaria occurs at the menstrual period, especially in connection with dysmenorrhea.

Whilst the difficulty in tracing the causes of chronic urticaria is so fully recognised, it may be worth consideration whether some instances of it are not due to the effect on the vascular system of subacute uterine or ovarian irritations of various kinds. Probably few skin diseases are less amenable to treatment than chronic urticaria, and mainly from the difficulty of discovering the cause of irritation. We may put our patients upon the most careful regimen; we may cut off one by one in

turn most of the articles of their diet; we may by remedies succeed in placing the gastro-intestinal canal in a good condition; and yet the urticaria may remain just the same as before.

In speaking of the causes of urticaria as a whole, after mentioning intense mental emotions, the ingestion of certain kinds of food, drink, or medicine, and the irritation of the alimentary canal by intestinal worms, Hebra says—"Certain physiological changes, such as menstruation and pregnancy in the sexual functions of women; various pathological conditions of the generative organs, including tumours of the uterus; and lastly, those manifold disorders of the genital system which are grouped together under the name of hysteria, and in which we are often unable to detect any local organic disease, either during life or after death, are the internal causes of this disease."

Urticaria, both acute and chronic, seems to be a morbid condition depending on reflex sensation. In the acute form the disease is too ephemeral, too entirely under the control of a simple remedy to allow any change in the composition of the blood as an explanation of its causation; and the chronic form, whether continuous or intermittent, is so precisely the same in appearance to the acute that it is difficult to conceive that the cause may be nervous in the one form and connected with blood disease in the other. And, apart from many well-known instances of reflex sensation in the human body, the first phenomena of epilepsy are sufficient proof of the influence exercised by distant irritation on the circulation. May it not also be considered nearly certain that very much of the benefit of blisters in acute disease of the internal organs,—a benefit fully borne out by the general experience of the profession, in spite of the opposition raised by some writers on this mode of treatment,—is due to the reflex action on the vaso-motor nerves of the inflamed organs from the irritation of the nerves of the blistered surface?

It is probable that in seeking to remove the exciting cause of chronic urticaria we are too often satisfied with confining our attention to the alimentary canal. We may have to treat in chronic urticaria a severe neuroses, or at least to recognise in it a manifestation of a nervous diathesis, which in other members of the family may show itself in conditions more

generally recognised as neuroses. Thus in a case lately under treatment, in which it was impossible to recognise a distinct specific cause, the patient's mother had been the subject of mental depression, one sister a victim to aggravated hysteria, whilst another had been subject to ptosis of one eyelid, with convulsive twitching of one side of the face. All these sisters were old ladies at the time of observation, and the one first mentioned had had intermittent urticaria for many months.

In a former number of this Journal (1867) a case of this complaint is recorded, where the different members of the same family appeared each of them to have some neuroses. The parents were asthmatic, one grandfather asthmatic, one grandmother had angina pectoris and rheumatism; the brothers were rheumatic, and four of the children suffered from intermittent diarrhea, alternating apparently with the tendency to or actual development of urticaria.

The very fact that chronic urticaria so frequently takes on an intermittent form favours the idea that in this disease the nervous system is mainly in fault. It occurs too under the influence of depressing mental conditions, especially longcontinued anxiety, and may be more or less connected with the cutaneous hyperæsthesia so often met with among the insane, which sometimes takes the form of prurigo, and more frequently leads to an invincible dislike to the touch of any clothes whatever.

If it be granted that chronic urticaria is due to a neurosis, its dependence on uterine or ovarian irritation is easily intelligible. The influence exercised by such local irritation on the cutaneous nerves, or on the vaso-motor nerves, in the immediate neighbourhood of the skin, is very similar to the reflex phenomena of epileptiform convulsions, of vomiting, of vertigo, of infra-mammary pain, and of many hysterical symptoms that own the same exciting cause.

A group of such cases has lately come under my observation.

A young lady, aged 15, whose father has been lying for seven years, more or less imbecile after apoplexy, and subject to convulsive fits, has occasionally had intermittent attacks of urticaria for several years. Perhaps intermittent is not quite the right word, as there has been no periodicity about the attacks; but her mother states that during the last five years she thinks the girl has never passed two months without being

affected in this way to some extent. She menstruated early, and since then has had much more of this complaint. After the first catamenial disturbance she has been extremely irregular. Her general health is otherwise excellent. As the regularity of the menstrual function was restored she gradually lost the urticaria.

A lady of middle age, troubled with leucorrhea and dysmenorrhea, has had urticaria for many months. She digested well. No remedies were of the slightest use to her until the leucorrhea had been stopped, and the catamenial functions rendered normal. She then lost the urticaria.

A lady, aged 40, one of whose brothers had been insane, had been laid up some years ago with an abscess in the neighbourhood of the left ovary, the suppuration from which found an exit through the walls of the vagina. She apparently recovered from this; but some time afterwards, on attempting to walk about more and to visit among the poor, the pain in the region of the left ovary recurred, and with it a very obstinate form of chronic urticaria, the intensity of which seemed to bear a close relation to the amount of walking exercise taken. Whenever the pain about the left ovary was increased the urticaria was most troublesome; and vice versâ, when the patient was in bed, and the affected region thoroughly at rest and painless, the urticaria subsided.

In this case the general health was good, and there is little doubt that the pelvic condition was the exciting cause of the disease of the skin.

It is not unlikely that other organs may be the seat of the exciting cause of this complaint. It is certain that the alimentary canal is occasionally the starting-point, although I believe that the chronic form of this disease is far less frequently connected with indigestion than the acute. I am not sure that irritation in the hylus of the kidney may not sometimes excite the morbid phenomena on the skin; but wheresoever the irritation commences, a peculiar state of the nervous system is necessary for the development of chronic urticaria. The disease itself is a neuroses, and its exciting cause is irritation at the periphery of an eisodic nerve.

It is interesting to observe how often other members of the family are affected by some distinct disease of the nervous system.

This view, then, pretty generally accepted at the present day, will afford some aid in the treatment of this very intractable disease.

Niemeyer says—" We do not know of any efficient remedy for chronic urticaria."

Trousseau remarks somewhat more hopefully, that, "When urticaria assumes a chronic form, it sometimes resists the best-devised modes of treatment. Some benefit, however, is attained by frequent emetics, the preparations of quinine in large doses, and arsenical solutions."

Hebra says—"As we are for the most part ignorant of the cause of chronic urticaria, our treatment of it is generally limited to the use of agents which relieve the itching, and tend to remove the unpleasant sensations experienced by the patient. With this object we should keep the patient cool, directing him to wear thin clothes, or to be lightly covered in bed. We should sponge the skin with cold water; or, if the eruption is confined to certain parts of the body, cold lotions may be prescribed. Douche baths again may be ordered; or the patient may be told to bathe in a river or in the sea. However, the chronic variety of urticaria often resists all these measures, and will not subside until the person affected with it has changed his residence and altered his mode of life."

Our English authorities speak in the same strain.

No doubt the difficulty of treatment consists, as Hebra says, in our ignorance of the cause of the disease; but there is a good deal that may be done in those cases in which, with sensitive nervous centres, the exciting cause is connected with the pelvic viscera. In such cases arsenic has in my hands proved very useless, but considerable benefit has accrued under the bromides, and especially under a combination of the bromides with iron. In the case of amenorrhea before-mentioned, the catamenia recurred with very little remedy, except a diminution of brain-The frequency with which amenorrhea occurs in girls during their months of study, under the brain pressure of many lessons, so common in our schools at the present day, with the normal recurrence of the menstrual function, without the aid of any medicine during the holidays, or simply by diminishing the amount, or altering the kind of study, must constantly attract the attention of those members of our profession who see much of such places of education.

But with all cases of chronic urticaria, in which an uterine or ovarian exciting cause may be reasonably suspected, I am in the habit of using tepid alkaline baths of some duration. Hebra tells us that "some have advised that the whole body should be immersed in baths to which common salt, bicarbonate of soda, or carbonate of potass, has been added. This, however, is quite useless." It is hard to urge a remedy against so high an authority; and I believe he is right that such baths are useless in directly affecting the irritation of the skin.

But the effects on the pelvic viscera of such baths continued from twenty to forty minutes at a time are very great, especially if the temperature is not above 80° Fahr. Such baths relieve local congestion, and their effect may be enhanced by warm vaginal injections. Of course in this, as in every other malady, each case must be treated on its own merits. And whilst we endeavour to apply our remedies to the local lesion, intestinal, uterine, ovarian, &c., we should also seek to allay the sensibility or improve the strength of the nervous centres, by good habits of body, by healthy mental training, by due equipoise of work and rest, by sedatives in highly excitable people, by strychnia, the hypophosphites, or the stronger tonics in the very weak.

With all possible care in searching for the cause of chronic urticaria, this disease will often remain one of the *opprobria* medicinæ. The treatment may be sometimes rendered less unsatisfactory by following the hints given us by Hebra and Scanzoni, and so recognising its cause in an affection of the uterus and ovaries.

REVIEWS.

The American Journal of Syphilography and Dermatology. Edited by M. H. Henry, M.D. Vol. I.

In former numbers, the Italian, French and German Dermatological Journals have been noticed; however, America is determined not to be behind in dermatological matters. In her universities and colleges professorships of Cutaneous Medicine exist. New York possesses a Dermatological Society; and lastly a Journal devoted to Syphilography and Dermatology appears under the editorship of Dr. Henry, Surgeon to the department of

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Venereal and Skin Diseases at the New York Dispensary. We may say that the numbers before us are highly creditable to the Editor. With regard to the original communications, we may particularly notice a paper on the pathology of eczema, by Foster Swift, M.D.; observations on the papular syphilides, by R. W. Taylor, M.D.; and on vaccino-syphilitic inoculation. A well-assorted selection from foreign journals is contained in each number. As our space is limited, we shall extract a few paragraphs from a paper by Dr. Piffard, page 217, entitled "Histological Contributions," and which, we have no doubt, will be interesting to our readers:—

"An accurate knowledge of the histological changes taking place in the different cutaneous lesions is the greatest present desideratum in dermatology; but the practical obstacles in the way of obtaining material have, heretofore, been so great, that comparatively little has been done to increase our information.

"The methods usually employed are—First, to remove from the cadaver a portion of morbid integument, and immerse it in a hardening solution of chromic acid, bichromate of potash, etc. After hardening, a thin section is made with a razor or Valentine's knife, or the specimen may be imbedded in wax or paraffin, previous to section. The difficulty here is, to obtain a sufficient supply of material—corpses with cutaneous lesions being a rarity.

"Secondly, we may remove, with the scalpel, a portion of skin from the living subject, then immerse it for two or three weeks in the hardening solution, or proceed as before; or, instead of hardening, employ the process of gum imbedding, or make sections of the tissue in a comparatively recent state; or, what is still better if we can accomplish it, make an immediate section of the fresh tissue. The thin section being obtained, we can then examine it microscopically; but if we desire to preserve it for future observation, it will be necessary to submit it to additional processes. It may be mounted immediately in cells with glycerine, or some other preservative fluid; or, what is less troublesome, glycerine jelly (Beale's formula). If, however, we desire to mount in Canada balsam or damar, we must immerse the section in strong alcohol afterwards, or turpentine before the application of the balsam. The alcohol removes all water from the tissue, as the turpentine prepares it for a thorough penetration of the balsam. These various processes differ in their comparative convenience of application; but a point of far more importance is the relative condition in which the section remains after being submitted to them. Have we, in a fairly-mounted balsam preparation, a reliable representation of the histological changes which have taken place in the specimen we are submitting to examination? This can only be ascertained by a comparison of results. A patient with extensive psoriasis having presented himself, we removed from his left side, with the scalpel, a portion of morbid integument sufficient for our purpose. This was divided, one-half placed in Müller's solution; the other was imme

diately imbedded in a mixture of white wax and olive oil. When the wax had hardened, section with the razor was attempted, but unsuccessfully; the tissue being too soft, yielded before the blade, and could not be cut of sufficient thinness. We then covered the exposed surface with a layer of strong collodion. In a few moments the ether had evaporated, and the outer surface of the specimen was firmly held by the cotton. The razor being then introduced under the thin stratum of cotton, we were enabled to obtain very satisfactory sections. After section, the dried cotton is readily detached from the tissue. Of these sections a portion was stained with carmine, and immediately mounted in glycerine jelly, while others were placed in alcohol or turpentine, or mounted in balsam. The other portion, which had been placed in Müller's solution, was removed after two weeks, and sections made from it in the usual way were mounted in balsam. The different specimens were then submitted to a comparative microscopic examination. Without entering into a minute statement of the changes observed in psoriasis, so well described by others, we will briefly state that in all the specimens we found, the papille increased in length and breadth, and the rete malpighii in thickness, but we were much struck by the different appearances presented by the papille in the sections treated in different · ways. In the fresh jelly mountings they were of an average length of .0093in. (about .23mm.), and breadth of .0047in. (11mm.), while in balsam mountings they were only .006in. (.15mm.) in length, and .002in. (.05mm.) in breadth. It was clear from this that the papille, and probably other portions of the tissue, were not only greatly shrunken, but their relative proportions distorted by immersion in alcohol, &c. This observation, and others of a similar nature, led me to doubt the value of the result obtained from the examination of hardened tissues, and to seek to devise means by which specimens from the living subject might be studied in a recent condition. The difficulties in the way were the unwillingness on the part of patients to part with portions of their integuments of requisite size, and the difficulty of obtaining, even with the collodion process, satisfactory sections. These, however, may be overcome by the use of the "Cutisector," which it is the object of this communication to bring to the notice of those interested in cutaneous pathology. [An engraving of the instrument is given.]

"The instrument consists of two parallel blades, which may be approximated by means of screws. The knife being held as a pen, a perpendicular incision may be made through the whole thickness of the skin, and the knife withdrawn, leaving attached a thin slice of tissue which can be easily removed with a pair of fine forceps, and placed under the microscope. The pain of the operation is of course not great, and may be entirely obviated by the local application of ether spray. The wound heals by first intention if its edges are approximated, and leaves no scar. With this instrument we have obtained some very beautiful sections. The advantages which we think it possesses are—That we are enabled to obtain satisfactory sections of fresh tissue without serious inconvenience to the patient, and to study the changes taking place in them under the most favourable conditions. As an aid to positive diagnosis, its employment will become more extended as our knowledge of cutaneous histology advances."

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We wish the American Journal of Syphilography and Dermatology all success. The Editor, "who is the right man in the right place," has our best wishes.

The Medical Works of Francisco Lopez de Villabolos, the celebrated Court Physician of Spain, translated with Commentary and Biography. By George Gaskoin, K. Commander of the R. Military Order of J. Christo of Portugal, Surgeon to the British Hospital for Diseases of the Skin, &c. London: John Churchill & Sons.

In the autumn of 1867, Mr. Gaskoin was "led by subjects of professional inquiry to the library of the British Museum," where he discovered quite accidentally the work of Francisco Lopez de Villabolos, entitled—"The Summary of Medicine: with a Treatise on the Pestiferous Bubas." The two first sections of the work consist of a bibliographical sketch containing, we need hardly say, a vast amount of interesting information. The last part of the work is devoted, amongst other matters, to a dialogue on Tertian Fever, Circulation of the Blood, &c. For the manner in which Mr. Gaskoin has executed his task, we speak only with words of praise. The make-up of the book reflects the greatest credit on the publishers.

The Liverpool Medical and Surgical Reports. Edited by P. M. Braidwood, M.D. and Reginald Harrison, F.R.C.S. Vol. iv. London: John Churchill & Sons.

The have received the 4th volume of the above-mentioned reports. Dermatologists will find, at page 71, a very readable paper on Eczema, by Mr. Edgar A. Browne, in which, after first describing the difference of opinion existing between Willan and modern observers, he then proceeds to say that a typical patch of eczema is often surrounded by a margin of hyperæmic skin, studded, not with vesicles, but with papules. As the eczema spreads, this tract becomes, like the central portion, vesicular, and papules are no longer to be seen. It is also noted that a patient's skin may present the appearances typical of eczema in one place, in others only a papular eruption; and that, by the action of a slight irritant to the skin, a papular

eruption may be produced, which by a prolonged application may become vesicular. "The frequency with which this papular eruption occurs in cases which present all the admitted marks of eczema, has seemed to some writers to afford grounds for describing a papular variety of eczema, and for suggesting that if the name lichen be retained, it is to be understood to signify a papular form of eczema." However Mr. Brown, does not readily concede that an eczema papulatum exists. A few pages further on, the question of whether syphilis is ever a cause of the disease under notice is discussed, and answered in the negative. On the whole, Mr. Brown's paper shows much thought and original research. We are also favoured with an abstract of a paper by the same gentleman (p. 178), on "Bromidrosis"—a disease he believes due to a debilitated condition of the skin, and consequently of its capillary nerves.

Want of space prevents our entering more fully into an examination of the various papers contained in the volume before us.

The Lay Element in the Services and Synods of the Church. By T. W. Belcher, M.A., M.D., Dublin; B.M. and M.A., Oxon.; Fellow and sometime Examiner and Chief Librarian College of Physicians, Dublin; now Senior Curate, Charlton, Dover. London: J. Masters, 1870.

THE Rev. Dr. Belcher, F.K. & Q.C.P.I., lately Physician to the Dublin Dispensary for Skin Diseases, and a valued contributor to former numbers of this Journal, has published an interesting pamphlet on "The Lay Element in the Service of the Church," from which we take the following extract:—

"Medical Lay Work in Parishes.—Any lay work which can enlist the services of medical men, especially medical students, will effect a vast amount of good. I speak from personal knowledge, when I say that there is no earthly calling which does half as much for suffering and for the poor as this does. Very many of its members are devout and intelligent Christians; with scarcely an exception, all do a large amount of gratuitous service for the poor and for gentlefolks in trouble and in needy circumstances. It is taken as a matter of course, that a physician should do service freely for the poor; but why not the lawyer also. What is wanted, then, is organization. The medical man in the parish is often the parson's best friend. Many a medical man has it in his power to do good, and say a word in season, which only the day itself shall declare, and which may help to earn for him the immortal distinction recorded in Holy Writ of some of the early Christians

whose names are in the 'Book of Life.'—(Phil. iv. 3.) In one way, a physician can almost engage in a medical diaconate, by going about to the sick when specially desired, in company with a priest or deacon, and in this way I have myself acted when a layman; he can prevent the offerings of the faithful being spent on cases where they could be of no service, or on cases wherein the designing might, as they often do, seek to impose on the clergy."

At page 16, we have some remarks regarding clergymen practising physic, &c.

Clinical Record.

PIGMENTATION OF THE SKIN.

Under the care of Dr. H. S. Purdon.

JOHN REA, aged 32, by occupation a carpenter, 5 ft. 8 in. in height, 11 stone in weight, strong and healthy. When crossing the line at N. C. Railway in January, 1870, was struck (by the buffer of a carriage that was being shunted) on the back and left side, being sent "flying" for three or four yards. Was lifted in a fainting condition. Three days after the accident Dr. Purdon saw him, and, upon examination, found dulness posteriorly over the base of left lung, owing to pleuritic effusion. Moreover, the heart was found to be displaced, and pulsating in the epigastric region. None of the ribs were broken. He was ordered iodide of potassium and rest, under the use of which he became well enough to resume work, and the patient was lost sight of till June 21st, upon which day he again presented himself, complaining of sickness and constant vomiting that commenced six days ago; he also had suffered from diarrhea for some weeks; was very weak; tongue red, and angry-looking; tenderness over stomach; no appetite; constant thirst; pulse weak, and 78 per minute. The history he gave was that about two months since he began to sweat greatly, which, however, he attributed to the warm weather. His feet especially troubled him, so much so, that he had to cut his boots in several places "to let the air in"; he had gradually become thinner, and scarcely able to walk. The skin of the body had also assumed a darker appearance, being of a dirty yellow colour. The excessive sweating, constant vomiting, diarrhea, and discoloration of the

skin, all pointed to some affection of the sympathetic system, probably of the solar plexus.

June 24—Vomiting no better; complains of a feeling of tightness around the abdomen, inducing a sensation of suffocation, to relieve which the patient is obliged to take several full inspirations. Constant headache; notices skin of hands and arms assuming a darker appearance than natural; ordered blister to epigastrum, after removal of which the surface to be dusted with morphia, also, liquor calcis saccharatus, in drachm doses.

June 25—Fainted upon attempting to rise this morning; vomiting has however ceased. From this date he progressed favourably—subsequently taking sulphate of iron in infusion of quassia. When seen in August, he was seemingly in good health, the skin becoming of its natural colour; he is also gaining in strength. In this case a temporary congestion of solar plexus, the great centre of the sympathetic system, had probably occurred, and its functions were thus interefered with. He is now (October) quite well.

CASE OF ECZEMA, IN A PATIENT SUFFERING FROM LOCOMOTOR ATAXY.

Under the care of Dr. H. S. Purdon.

PATRICK MULLAN, aged 38, married, no family, never had syphilis, by occupation a mechanic, admitted at Hospital for Skin Diseases, Belfast, April 20, 1870, for eczema of both legs, of some months' duration. His peculiar manner of walking, and staggering gait, at once struck Dr. Purdon as characteristic of progressive locomotor ataxy. When the patient was made to place his feet close together, and shut his eyes, he was in immediate danger of falling. If asked to walk with his eyes closed, the patient staggered like a drunken man muscular power unimpaired; had slight anæsthesia of feet; could not "feel the ground," to use his own expression; formerly complained of "pins and needles" running into legs; pain compared to sensation of a tight cord around abdomen, is likewise experienced; never had any of the flying pains, characteristic of the disease in limbs; is now impotent; formerly had seminal emissions and satyriasis; bowels usually constipated;

expectorates every morning, on awakening, a thick tenacious mucus; double vision, and sight failing. Disease attributed to a severe wetting received about three years since. His face is full and anxious, and manner intelligent, but when describing his symptoms, &c., he is excited; surface of both legs covered by an eczematous eruption, with skin somewhat infiltrated, the disease evidently due to impaired nutrition, predisposed to by slight edema. He was ordered the hypo-phosphite of soda, in ten-grain doses, thrice daily, as a nerve tonic; also, a pill containing the nitrate of silver every evening, calomel ointment,* and bandage to legs, diet to consist of plenty of nourishing food. When last seen in August his legs were better, but his other symptoms not much improved. At this time Dr. Purdon happened to have a patient in the General Hospital affected with the same disease—viz., locomotor ataxy, a few brief notes of which may not be uninteresting, especially as there was well-marked anæsthesia of skin of both feet and legs, that was slowly extending: -William Maxwell, aged 28, admitted August 6th, 1870; married two years—no family; mother died from phthisis fifteen years ago; a brother dead from same complaint, aged 18; and one of family (brother) ill at present from same disease. For nearly two years has felt "numbness" in both legs. In April last, whilst employed working in a funnel for a period of eight days, he was during that time wet from shoulders to waist. At dinner-hour he dried himself at a furnace, and again resumed work, only to be wet again. His fellow-workmen began in a short time to take notice of his peculiar gait. After this he complained of his feet being cold, and having lost all sense of feeling, although he could tell well enough any variation in temperature. At this time he used to fill his boots with cinders, which gave him a "better hold of the ground." Complained a good deal of formication, and also of flying "rheumatic" pains in the limbs, likewise of weakness of back at lumbar region. Had frequent sexual desire, and would usually have connection with his wife four or six times of a night. Sight always good; bowels habitually costive; muscular power of legs good; appetite

^{*} The calomel ointment used at the Belfast Hospital for Skin Diseases consists of one drachm of calomel to an ounce of oxide of zinc ointment, and which the late Dr. Pereira looked on as nearly a specific for certain forms of skin disease.

fair; dulness on percussion under left clavicle and expiratory murmur prolonged. He was ordered the bromide of ammonium in a bitter infusion. The bromide, on the authority of Brown-Séquard, acts especially on the medulla oblongata. No doubt, the posterior columns of the cord are atrophied; at least such has been found to be the case in the usual examples of this disease. Under the continued use of bromide of ammonium he certainly became much improved in walking, but his chest symptoms became aggravated, which, however, under the use of cod-liver oil, rum, and milk, were kept in abeyance. He left the hospital of his own accord, and has not since been seen.

It may be interesting to add that in a case of locomotor ataxy, reported by Dr. Winson, Boston Medical and Surgical Journal, October 6th, 1870—

"The distinguishing features of the case were:-Ten years back there was external strabismus, dimness of vision, finally, almost complete loss of vision; recovery complete in six months (unless the frequent "numbness" of eyes is to be considered a remnant of this). A very quick pulse was probably found as early as this. A year later, the characteristic pains in feet and legs began and continued seven and a-half years; and coincident with them was incipient paralysis of the bladder. Three years later, herpetic eruptions on thighs, legs, and penis, occurring at intervals through three years. Two or three years later, great difficulty in walking by night, and disordered action of feet in walking by day. Three years later (two years before death), pain decreasing, and localized contractions beginning in abdomen, thighs and penis; hemoptysis. One year later, straddling gait, and inability to walk straight across room; general wasting. Seven months before death, seminal emission; two and a-half months ago, cough, changed voice, and stupor in evening; in another fortnight, night sweats; the next week, serious disease of right lung, prostration, deafness (breaking in at last upon steady occupation); in three weeks more, similar diseased action evident in left lung, steady increase of all symptoms till, in four weeks more, death occurs. Equally characteristic are the changes of structure in the spinal marrow, as described by Dr. Edes, viz., substitution of connective tissue for the normal nerve tubes in the posterior columns and the posterior nerve roots; the partial disintegration of tissue and existence of exudation corpuscles. These changes affected the posterior columns, &c., along the entire length of the specimen sent to Dr. Edes (viz., some eight inches of the lower portion). The characteristic symptoms of the first stage of progressive locomotor ataxy (viz., a uniformly rapid pulse, disturbances of vision, and the shooting, shifting, intermittent pains) are plainly marked; and it is some four years before the second stage (as indicated by disorder in the coördinating power and the necessity of supplementing it by eyesight) declares itself. If failure of coördination in the arms is the distinguishing mark of the third stage, our patient never reached it; but I submit that the deafness, the impairment of deglutition, and the very peculiar lung lesions, may be referred to the same histological changes as the more familiar symptoms, and I very much regret that portions of the encephalon and the medulla were not sent to Dr. Edes."

According to Trousseau, there is abnormal vascularity of the posterior columns of the cord; it is also observed in the motor oculi and optic nerves and tubercula quadrigemina, due to repeated congestion of these structures.

Editorial Commentary.

THE NECESSITY FOR PROFESSORSHIPS OF DERMATOLOGY.

TTE have long been of opinion that Professors or even Lecturers on Dermatology are much required at every Medical School. A course, say of three months in Summer, combined with clinical instruction, would supply an existing want. The rapid advances made of late years in cutaneous pathology and therapeutics absolutely demand the recognition of Dermatology as a distinct branch of study. Questions on the diagnosis and treatment of diseases of the skin are now frequently asked at the Licensing Boards, and the student should certainly have the opportunity of acquiring the knowledge demanded. Our Continental and American neighbours are far ahead of us in this matter. At Paris, Strasburg, Montpellier, Vienna, Munich, Heidelberg, &c., as also in nearly every American College of any note, a Professor or Lecturer on Dermatology is to be found; indeed, in the latter country medicine and surgery is cut up into an unlimited number of distinct subjects, an arrangement which we have no wish to see imitated; but skin diseases, ophthalmic surgery, and mental diseases are subjects well worthy of special notice, and to which we respectfully beg to direct the attention of "those in authority." Erasmus Wilson, F.R.S., has by his liberality set us a noble example, not only in establishing the chair of Dermatology at the Royal College of Surgeons, but also by his donations to its Museum.

THE TURKISH BATH.

THE following extracts from a return to an order of the Honourable the House of Commons, dated March 22, 1870, for the Lunatic Asylums and Workhouses in the Counties

of Cork and Limerick in which Turkish baths have been erected, and stating to what extent such baths are now in use, will be read with interest. We shall first give the medical officers' reports:—

"District Lunatic Asylum, Cork, 8th April, 1870.

"In reply to your inquiry as to the efficacy of the Turkish bath, you are aware that it was in this asylum it was first used, in the treatment of insanity. On my recommendation, and on my application to the Board of Governors to have a suitable building erected for the purpose, which was willingly complied with, I am happy to state that the anticipations I formed have been fully realised.

"At present, about 80 or 100 patients use the bath daily, except on Sundays; it is found to improve their condition both mentally and physically. According to my experience, the beneficial effects of the Turkish bath, in promotion of the general health, are more observable amongst the idiotic and epileptic classes, who are necessarily more confined than the other inmates, and therefore less capable of taking exercise; to these, by promoting the action of the skin, it to a great extent, supplies the place of exercise in the open air, and is beneficial to all patients incapable of taking a moderate amount of exercise. As a remedial measure in the cure of insanity, it appears particularly efficacious. In cases of melancholia, dependant, probably, on sluggish circulation of the blood in the brain; in puerperal mania, and in cases connected with catamenial irregularities, it is also useful. I have also seen great benefit from its use in scrofula and rheumatic affections. I do not consider it of any advantage in acute mania, and in such cases would rely more on the "hot-water bath," with cold effusions on the head. As a means of cleanliness, it is the most effectual and cheapest that can be adopted in a public establishment.

"As a hygienic measure, I feel persuaded that it should form an integral portion of every public institution, such as gaols, prisons, and union workhouses, where many are assembled, and have only a limited amount of exercise.—I am, &c.,

Thomas Power, M.D.

"To the Inspectors-General, "Office of Lunatic Asylums, Castle, Dublin."

"Limerick District Lunatic Asylum, 8th April, 1870.

"The Turkish bath now in use in this lunatic asylum, for the past seven years, has been in our judgment of the greatest benefit as a curative agent in acute mania; we have seen it exercise a most soothing effect in numerous very excited cases, and the cutaneous circulation has become much improved under its agency, thus aiding very considerably to restore a healthy state both of mind and body: we can with truth say it continues to produce the most favourable results, and in no case has its use proved of the slightest injury, and the patients seem always to enjoy the idea of going into it.

"In various physical diseases as dyspepsia, cutaneous affections, rheumatism, and febrile attacks, it has proved most salutory, and in conclusion, we are of opinion that no insane hospital can be considered perfect, as

regards its curative power, without the addition of such a powerful remedial agent as the Turkish bath.—R. FitzGerald, M.D., Resident Superintendent.

ROBERT R. GELSTON, M.D., Visiting and Consulting M.D.

"The Inspectors-General of Lunatic Asylums."

The next report is from the medical officers of the Fermoy and Middleton Unions, respecting the benefit derived from the use of the Turkish bath in those workhouses. We have only room for the last-mentioned report:—

Report from the Medical Officer, Week ending 13th April, 1870.

"Sixty-three cases in General Hospital and five in Fever Hospital. House generally healthy, well ventilated, and free from any epidemic. Provisions of good quality, and regularly supplied.

"I beg to report that the Turkish bath of the Middleton Union Workhouse has been in active operation for the last six years, a period sufficiently long to form a somewhat correct estimate of its merits. It is in almost daily use, and is pretty generally availed of by almost all classes of the inmates, of almost all ages; and although the establishment is particularly well provided with excellent and suitable lavatories for almost all classes, still we find that the Turkish bath, although in nowise superseding them, takes its proper place as a very valuable addition, applicable in many cases in which they are not, whilst it may be stated with confidence that by no other known mode of lavement can the same absolute cleanliness be insured, whilst its value as a means of drying the clothes (and thus affording at all times an ample supply of thoroughly aired clothing at an expense not exceeding that hitherto expended on fuel for a similar purpose, which answered the purpose comparatively very inefficiently) can scarcely be overestimated, a statement in which I am fully borne out by the master and matron, who entirely coincide in my views on this part of the subject. The schoolmaster and schoolmistress also bear their ready testimony not only to the enjoyment, but beneficial effects derived from its occasional use by the school children under their charge. In fact, both young and old seem to derive both considerable enjoyment and considerable benefit from the occasional judicious use of this invigorating luxury. As regards my hospital patients, the class of cases in which I have found it most useful were the various forms of scrofula, rheumatism, anasarca, and paralysis, in which two latter complaints, when not dependent on any organic lesion, we have occasionally obtained beneficial results; but especially in cutaneous affections of almost all forms in which its steady use has been almost uniformly crowned by a beneficial result, and with this exception, my experience does not lead me to regard it as a mode of cure (unassisted by other means) in, perhaps, any other form of disease. I am sure it would prove a valuable auxiliary in the reduction of dislocations, and also in the taxis for the reduction of strangulated hernia, and in some cases of retention of urine; but I cannot speak from experience. In fine, as in my opinion the judicious use of the Turkish bath unquestionably tends to conduce towards and promote the general healthy tone of the establishment, I cannot refrain

from expressing my opinion that neither this nor any other public Institution can be properly mindful of the health of its inmates, or in a word, at all complete, without being provided with this very valuable addition to its other hygienic appliances. "Benjamin Johnston.

"Poor Law Commission Office,

"Dublin, 26th April, 1870."

Such are the results obtained in the above-mentioned unions from the Turkish bath—a powerful auxiliary to the physician in the treatment of many forms of chronic disease, both cutaneous and otherwise.

GLYCEROLE OF STARCH.

THIS preparation is made by rubbing well together one part of starch in eight of glycerine; then heat the mixture gradually to 240° Fahr., constantly stirring until a translucent jelly is formed. The glycerole of starch is a capital substitute for lard in making ointment. Moreover, this preparation of starch seldom becomes spoiled, and keeps for a very long time. As a local remedy in many acute affections of the skin, and to prevent the pitting of small-pox, it deserves a more extensive trial.

CARBOLATED TINCTURE OF IODINE.

J. EVANS, M.D., State Apothecary, Dublin, has recently introduced a new preparation of iodine and carbolic acid. Good results are occasionally obtained by its use in cutaneous diseases, as in eczema, psoriasis, and tineæ; in the last it acts very well. Internally, the colourless tincture ought to succeed much better than carbolic acid, nor does it occasion any derangement of the stomach; it often allays vomiting, particularly if it be of a yeasty type. The dose would be from 10 drops to 3i (each 3i containing gr. i of iodine, gr. i of carbolic acid, and gr. ½ of potass iodi.)

THE DERMATOLOGISTS' POCKET CASE.

THE workers in each special department of medicine and surgery have their instrument cases. The ophthalmic surgeon, the aurist, the chiropodist, the accoucheur, &c., possess each their case; in fact, the dermatologist is the only person left "out in the shade," probably owing to the reason that he

requires very few instruments. However, those few may with advantage be arranged together, so as to be easily carried. Any surgical instrument maker can provide a suitable case for them. The instruments and appliances required, then, are as follows:—

- 1. A good lens, for examining diseased cutaneous structures, detecting the acarus, &c.
- 2. Forceps for depilation, after Bazin's model; useful for extracting the hairs in sycosis, tinea tonsurans, favus, &c.
- 3. Tweezers, with good broad extremities, for same purpose, when quickness in the operation is required, or when the hairs are pretty loose.
- 4. Cutisector, invented by Dr. Piffard, of New York, consisting of two parallel blades, which can be approximated by means of a screw; useful for removing an acarian furrow, or other portions of diseased skin, for the purpose of microscopic examination.
- 5. Caustic-holder, for Maw's caustic points, useful for "boring" into lupoid tubercles, &c.
 - 6. Set of probes and director.
 - 7. Abscess lancet.
 - 8. Set of camel-hair brushes, for applying fluids, &c., to diseased parts.
 - 9. Glass cage, for carrying preparations for microscope.
- 10. Hypodermic syringe, for injection of morphia in prurigo, &c., or of iodine in enlarged glands.
 - 11. Dissecting needle in handle.
 - 12. Very fine trocar and canula.
 - 13. Fine scissors, for removing hair, &c.
 - 14. Fine cataract knife, for opening abscess about neck, ganglion, &c.
 - 15. Nail nippers.
- 16. Scaling instrument (triangular), for removing scales, &c., for microscopic examination, or for other purposes.
 - 17. Tenaculum.

Boylston Medical Prize Questions.—We perceive, from the Boston Medical and Surgical Journal, that one of the two questions issued by the Boylston Medical Committee, appointed by the President and Fellows of the Harvard University, for 1871, is on "Recent Advances in the Pathology and Treatment of Cutaneous Diseases." The author of the best essay will be entitled to a prize of one hundred and fifty dollars.

SMALL-Pox.—In our last number we recorded a case of small-pox which was under observation during the month of May. We regret in having to report the outbreak of this disease in Belfast during the month of October. One case (of a mild type) presented the unusual occurrence of blue sweating; the scrotum

was on fourth day of eruption covered with a blue pigment. There was no deception, the utmost cleanliness was observed, and no outward application was used,—citrate of potash in effervescence being the only medicine required. During convalescence, Grimault & Co.'s pleasant and palatable syrup of iron and Peruvian bark was prescribed.

Sedatives in Eczema.—At page 45, Vol. II., of this Journal a paper will be found by Dr. Marris Wilson on "The Use of Sedatives in Eczema," the remedy used being Battley's Liq. Opii. To allay the excessive itching in eczema, especially at night, we have lately prescribed a sleeping draught containing chloral with advantage.

St. John's Hospital for Diseases of the Skin, London.—Since May, 1863, upwards of sixteen thousand patients have been admitted at this hospital. We look back with pleasure to a visit we paid St. John's in the Spring of 1869. The worthy Surgeon to the Institution (Mr. Milton), whose contributions to our pages are so interesting and important, is bringing out a new edition of his book on "Modern Treatment of Skin Diseases," which we are sure will be replete with sound, practical advice, both on the treatment of cutaneous diseases and on derma-pathology.

IODIDE OF LEAD OINTMENT.—This well-known remedy is not, we think, fully appreciated by Dermatologists. For some varieties of psoriasis, as well as in tinea circinata and scrofulous affections, it will be found useful as a local application.

The Mange in Dogs.—Mr. Eldridge Spratt, L.F.P. & S., Glasg., Medical Officer to the Hospital for Diseases of the Heart, has sent us a short pamphlet on how human beings may be affected with mange from dogs, written, however, solely for non-professional readers. We have for years been in the habit of keeping various kinds of dogs, and naturally enough have had our attention directed to the subject of mange—a term which implies several varieties. "Red mange" is nothing more than an ordinary eczema rubrum; when "the mange" proves contagious, as in the cases recorded in Mr. Spratt's pamphlet, it is either scabies or tinea circinata.

Miscellaneous Memoranda.

THE HAIR, BEARD, AND COLOUR OF THE SKIN.

Much attention has been bestowed, of late years, upon the marks and characters which distinguish the various races of man. The general form of the skeleton, especially the figure of the human skull, has been one of the most important indications of race, and one of the most generally employed means of classification. There are other distinctive features however, which, where they can be discovered, furnish a very good criterion of race:—I mean the characters and colour of the hair, beard, and skin. Every one knows how clearly these features separate the various tribes of Africa from the families of Europe. Every one has contrasted the light-haired nations of the North with the dark-haired inhabitants of more Southern climes; every one has remarked the general lack of beard among some peoples of the globe, and that others possess these hirsute appendages in abundance. To note a few of these features, will be the object of this paper.

The human family has been divided into different varieties, as The Caucasian Race, who are possessed of a fair skin, hair of varying colour, fine, long. and curling; beard abundant. The Mongolian Race, of a sallow, olive-coloured skin, drawn tightly over the prominent cheek bones; hair long and straight, and of a dark colour; either beardless, or, when the beard makes its appearance, very thin and scanty. The Ethiopian Race—dark-skinned, hair crisp, black, and woolly. The Malay Race—skin reddishbrown, hair black, coarse, and lank. The American Race—brown or copper-coloured skin, hair long and lank, and scanty beard. The Papuan Race—peculiar purplish colour of skin, with very harsh feel; hair extremely wiry, coarse, and frizzled. Thus those whose skin is white have an abundant beard, with straight and flowing hair. In the brown-skinned, the hair is usually straight and long, and the people beardless. Whilst in the black, the hair is woolly and crisp.

The hair, as is well known, is an appendage to the skin, and consists of a shaft and two extremities—the point and root, or bulb. The shaft is cylindrical in figure, but varies in size in different hairs. According to Leuwenhoeck, in a New Zealand chief, the finest of fifty hairs measured ¹/₄₅₀ of an inch. But variety of thickness is not, however, confined to the different hairs of one head: it is met with even in a single hair—flaxen hair being the finest, and black the coarsest. Wilson states that a single hair of a boy, eight years old, supported a weight of 7·812 grains; one of a man, aged twenty-two years, 14·285 grains; and it has been proved by experiment, that a human hair, 57 times thicker than a silk-worm's thread, will support a weight of over 2·000 grains. The different colours of the human hair depend on various chemical substances: black hair containing a greenish black oil, phosphate of lime, iron, sulphur, &c. Red hair contains a reddish oil, and a large proportion of sulphur. White hair has phosphate of magnesia.

Dr. Prichard, taking the colour of the hair as a leading feature, divided mankind into three principal varieties—the Melanic, the Xanthous, and the Leucos. The first-mentioned possessing very black or dark hair; the second known by light-brown, yellow, or red hair, fair skin, and blue or light-coloured eyes, which are the prevailing colours of the Teutonic race, now inhabiting a great portion of Northern Europe. In the third class, we have included the Albino. I may note, in passing, the permanence to a certain extent, of the colour of the hair as a distinction of race. By it we can, in some degree, see the influence of conquest or colonization in many countries. Dr. Beddoe adduces, in this respect, the light-haired people of Cork and Youghal, distinguished as they are from the darker inhabitants of the interior and Western portions of the Island, as a proof of the existence of Danish and Saxon colonies having been established at those places; and it is thus evident that during many ages certain physical peculiarities have continued permanent, and made themselves prominent, even after great admixture with other races. The woolly, crisp, and black hair of the negro is the same to-day that it was a thousand years ago, separating this people from the European by its peculiar character alone. Some Europeans may have, however, occasionally black woolly hair; and even among the different tribes of Africa, variations in the character of the hair are to be met with-even red hair has been mentioned as occurring in the Negroes of Congo, a fact related by Blumenbach.

Loss of colour, or greyness of the hair, is one of the results of old age: at earlier periods of life, it may occur from mental anxiety. That grief is a cause of this condition, is proved by many instances: for example, the case of Marie Antoinette, whose hair became silver-grey in one night. Sir Thomas More and Mary Queen of Scots, are other reported instances. King Henry of Navarre is said to have had part of his moustache turned white in a few hours, from anger at the passing of the Edict of Nemours. A more recent example of sudden whitening of the hair from fright occurred in the person of a Sepoy, who, having been tried by court-martial during the Indian Mutiny, was ordered to be blown from a gun, and, after having been fastened to the mouth of the cannon, the bystanders actually saw the hair of the head turn perfectly white. This story appeared in all the newspapers a few years ago, and was well authenticated.

Whitening of the hair of the beard is often observed in the present day, especially in those individuals who have abolished the use of the razor late in life. The hair of the beard grows about one line and a-half in one week, which, according to Wilson, would amount to nearly six inches and a-half yearly. So, if the hair continued to grow at that rate for fifty years, the old man of seventy must have retrenched his beard upwards of 27 feet. That it has reached a great length is evident from Holy Scripture, which speaks of the precious ointment running down Aaron's beard, even "to the skirts of his clothing."

The beard, in the reign of Mary, throve abundantly, as may be seen in the portraits of that age. The lawyers alone had a regulation imposed upon them concerning this fashion. An old historian thus remarks on the beards of his age:—"Some are shaven from the chin, like those of the

Turks; not a few are short, like the beard of Marquis Otto; some make round, like a rubbing brush; others with a pique devan; others being suffered to grow long. Therefore, if a man have a lean face, a Marquis of Otto's cut will make it broad; if it be platter-like, a long slender beard will make it seem narrower." An abnormal growth of hair is occasionally met with. Some races, as the Fejee Islanders, have the hair on the head in great quantity; in fact, what would be considered as a curiosity with us, is a natural character with them. Rayer mentions that he once saw a Piedmontese, aged twenty-eight, strongly built, who had little beard, but his head was covered with a most extraordinary crop of hair, frizzled on purpose, four feet ten inches in circumference; the hair was exceeding fine, and dark-brown in colour. Again, an old author, by name Turner, relates, "that upon the confines of Pisa, at a place called Holy Rock, a girl was born all over hairy," attributed to her mother looking upon the picture of St. John the Baptist drawn in his hairy vesture. In man, the skin is of use in conferring symmetry on the body, preventing too rapid evaporation, and defending the subjacent parts from injury. Moreover it is the seat of colour, which is looked on as a race characteristic. As a rule, the English have a fair skin, light eyes and hair: this type of race being called the Teutonic, in whom the skull is of an oval shape. The colour of the skin varies in degree of intensity both in the dark and fair-skinned races; and we may observe every shade of gradation, from the jet black of the Senegal Negro to the olive of the Northern Hindoo and dark complexion of the swarthy Spaniard. The colour of the skin depends on what is called "pigment," deposited in the cells of that part of the skin termed, in anatomical language, the "rete mucosum,"—this layer being black in the Negro. Pigment contains iron, phosphate of lime, and animal matter. As to the conflicting opinions regarding the different colours observed in the human skin in health, and as to what this colouring is due, the following remarks of Mr. E. Wilson are important. He says:--" By alteration of the solar influence, the pigment may be increased in those of fair complexions. On the other hand, it may be diminished in the dark to a very considerable extent. But we require not to proceed further than our own hearths for an illustration of the fact, that the blonde complexion may be rendered darker by the stimulation of light during the Summer months, and the quantity of pigment will be again reduced during the Winter season. To state the fact in physiological language, the activity of the function of the skin is increased during the Summer, and under the stimulus of the sun, while in Winter it is diminished to its minimum. One of the functions of the skin is the formation of pigment, and under the influence of light and heat, and of the sun's rays, this function is greatly augmented, and the skin consequently assumes a darker tint." Darkness of complexion has been, as we have just read, attributed to the sun's power. Now, in tropical countries, the inhabitants require a dark skin, for the simple reason, that any black substance absorbs the rays of light rapidly, whilst in those of a fair skin, intense heat blisters. Mrs. Somerville remarks, however, that other causes besides the sun, must have combined to occasion all the varieties we now see, otherwise every nation beneath the Tropics would be of the same hue. The complexion of

man varies also with the height above the sea, and the latitude of the region he lives in:— "Even supposing that diversity of colour is owing to the sun's rays alone, it is scarcely possible to attribute the thick lips, the woolly hair, and the differences of form, extending even to the bones of the skull, to anything but a concurrence of circumstances which pervade every part of the earth."

The nervous system, especially that part of it called the ganglionic, plays a very important part in the production of pigment. In some diseases of this system, we have excess of colouring matter deposited in the skin, as what is known as bronzing of the skin, freckles, &c. However it is right to mention that after producing inflammation in a part, the pigment cells accumulate and even penetrate through the walls of the vessels. For an interesting article on this subject, see Lancet, May 28th, 1870. instances, absence of the pigment, owing to the same cause, is observed. A curious disease called Carate, endemic in New Granada, is characterized, according to Dr. Tilbury Fox, by patches of various colours on the body, from dull white and crimson, to black and blue. Dr. Swayne has mentioned a case in which there was "a peculiar discoloration about the face, arms, and legs," these regions being spotted like a leopard. In addition to the above remarks on excess of pigment, it may not be uninteresting to say a few words on the want or absence of colouring matter in the cutaneous covering, which is either congenital or accidental: the former condition giving rise to those singular individuals known by the name of Albinoes. who are to be met with amongst all races of men. Even animals are occasionally subject to this freak of nature. The skin of an Albino is of a milk-white colour, the hair very fine and fair; the eyes are red, although, in India, theiris is blue and the hair silvery white. Owing to the intolerance ef light exhibited by these individuals, the pupil is small, and the head generally bent towards the ground. In twilight, however, the Albino sees very well—even, it is said, better than ordinary persons. This affection has been attributed to irregular nervous activity, and is generally hereditary. In the Negro, the complaint under notice is very striking, and several instances of "pied" Negroes have been recorded: their hair is white and woolly, and the iris without pigment. Pallas, as mentioned by Pickering, saw a white Negress born in London. She was small in stature, and had a fair complexion, with ruddy lips and cheeks. The girl had Negro features strongly marked. Another example is mentioned by the same author. The individual was a Kaffir. Her skin was pinkish white; the hair, although of a woolly nature, was of flaxen appearance. Dr. Ogle, in his paper on "Anosmia," or loss of smell, relates the case of a Negro, who, in his twelfth year, began to lose colour, which was accompanied by loss of smell, due to destruction of pigment of the olfactory region.

The accidental disappearance of the colouring of the skin in spots and patches, and the extreme blanching of this membrame, are occasionally met with. A remarkable case is mentioned by Dr. Good. The patient was a North American Indian, ninety years of age, who, during the last thirty years of his life, had been gradually becoming white. According to Dr. Damon, rapid blanching of the skin in Negroes, after severe fevers, is

occasionally known to occur. Every shade of colour is found among the Jews,-from the jet black of the Jewish Colony on the Malabar coast, to the olive of the Hindoo and ruddy white of the Saxon. The Jews, like the Arabs, have usually black hair, but many possess light hair and bushy beards, especially in some parts of Germany. Admixture of race by marriage might produce some of these effects, and it is interesting to note, on the authority of Dr. Hall, that on the Orange River there exists a tribe of half Dutch and Hottentots, possessing many features of each. But, as a rule, unless the stock from which both parents have sprung be very healthy and hardy, these hybrids die out, being frequently of a delicate constitution,—a fact noted by Dr. Paul Broca as occasionally observed among Mulattoes. Mr. Bollaert, in a paper on the "Anthropology of the New World," informs us that "the mixture of the European with the Indian, giving rise to the Mestizzo; the European with the Negress, forming the Mulatto; and the mixture of the Negro and Indian, forming the Zambo, and their breeding in and in—the result does not appear to be of a prolific nature, or satisfactory either physically, mentally, or morally." On the other hand, however—as, for example, in many parts of the Continent where the Teutonic, Celtic, and Sclavonian races are mixed—there has resulted a race conspicuous for their energy and versatility of mind. We find such a constant relation between climate and colour of the skin, that it is impossible not to perceive the connection between them.

A curious complaint, illustrative of the intimate connexion existing between the hair and skin is sometimes met with,—I refer to the so-called "Porcupine Disease," which affection has given rise to the improbable stories of Porcupine men and female Mermaids. Being an uncommon disease, the examples observed have been faithfully recorded. Thus, in the Philosophical Transactions for 1731, there is described the case of a boy, aged fourteen years, whose skin was of a dusky colour, thickened and covered with bristles resembling the quills of a hedgehog. Another instance is that of the Lambert family, who lived in the beginning of the last century. Of this family, John and Richard, two brothers, became notorious from the affection under which they suffered, and travelled through various parts of Europe, exhibiting themselves as "Porcupine men." This affection is often hereditary, and some of Mr. Darwin's followers speak of hereditary affections and mal-formations as though they possessed, to use Mr. Milton's words, "such an irrepressible tendency to prepetuate themselves, that in course of time they must constitute species or varieties of the human race." is not the case, for the families in which these mal-formations occur usually die out very rapidly; and although nature sometimes indulges in strange vagaries, as if she loved to perplex the scientific investigator, and to furnish food for laughter for the masses, she now and then astonishes us with Siamese Twins, Lamberts, pied Negroes, and six-fingered peopleextravagances, as it were, which puzzle the learned; but of this we may rest assured, in the words of Dr. Hall, that the colour of the skin, texture of the hair, shape of the skull, and form of the pelvis, have alike failed to supply, either singly or collectively, the slightest grounds for maintaining any valid specific distinctions. Thus the various races of man, while difEczema. 243

fering from each other in their physical conformation constitute nevertheless one species.

INFLUENCE OF THE PANCREAS ON FAT.—According to Dr. Dobell, "the influence exerted by the pancreas upon fats appears to be by breaking up the aggregation of the crystals of the fat, and altering its hydration. alters the molecular condition of the fat, mingling it with water in such a way that even ether cannot separate the fat from the water. A permanent emulsion is thus formed ready to mix with a larger quantity of water whenever it may be added. The pancreas, therefore, in acting upon fat, does not decompose it into fatty acid and glycerine; the absence of glycerine from the watery stratum and the presence of the glycerine in the pancreatized fat of the ethereal stratum having been demonstrated. It is well-known that, in addition to the influence of the pancreas upon fat, it has the power of converting starch into glycose by simple mixture. This property remains to a certain extent after the pancreas has exhausted its property of acting upon fat. The quantity of pancreas that before mixture with fat will convert about eight parts of starch into glycose, after saturation with fat will still convert about two parts of starch into glycose."—From "Proceedings of the Royal Society," No. 97.

ECZEMA.—The following extracts are from a paper by the late Dr. A. Buchanan, of Glasgow, Edin. Med. Jour., Jan., 1863: When the erythematous inflammation is severe enough, the principle of selection is sometimes exceptionally brought into play; and we may then have a few exudations, or papules, concentrated at particular anatomical points of the cutaneous surface, just as in the outbreak of an eczema, only as a superadded, or secondary, and not always constant phenomenon. The form of erythema in which this sometimes occurs is more chronic than erythema simplex, but still it runs its course in from two to six weeks, and is designated erythema papulatum. It is further distinguished from erythema simplex by its site, and other peculiarites which it would here be out of place to enumerate. Finally, the last stage of an erythema is a desquamation: erythema squamosum. Such a form may exist as a desquamation from the first, apparently as a mere inflammation of the epidermis, without the corium being more than congested, if, indeed, it be affected at all. To this form of erythema only is the title of pityriasis applicable; and it is also the only form which has any tendency to become chronic, the first stage of the disease invariably running a course more or less acute. It includes furfuraceous and membranaceous desquamations of the surface of the skin; as well as the peculiar and rare disease described by Devergie as pityriasis rubra.

ERYTHEMA STROPHULUS is a transitional form connecting erythema with the eczematous group. The papules which characterize it may be formed secondarily on congested patches; but they are still more frequently formed independently at particular points of selection. Instead, however, of assigning it on this ground a place side by side with lichen, the affinities of strophulus to erythema, as established by the course they both run, and by their frequent coincidence as symptomatic of the same derangement of system, are so well marked as to leave no doubt as to the natural position of

this affection. Some modes of irritation of the skin have a tendency to produce one of these inflammatory types, and other modes, with equal certainty, produce the other. If we irritate the skin with cantharides, mustard, ammonia, or corrosive sublimate; or if we produce irritation by rubbing a surface again and again severely; or if the skin be scalded, or burned, or irritated by urine; in all these cases we generally look in vain—I do not say always, but generally-for the production of papules, vesicles, or pustules upon the affected surfaces. The skin does not get thickened from the exudation of a plastic material at particular points, but both corium and cellular tissue get generally infiltrated with serous fluid. I think it highly probable that this fluid may filter directly through the walls of the blood-vessels, and that the more plastic secretion of the selective inflammations may be, on the other hand, elaborated in the cells of the affected parts. The epidermis, owing to this tendency to diffuse watery exudation, is not raised from the skin in minute vesicles, but the skin is blistered, vesicated; the accumulation of large quantities of serous fluid elevates the epidermis in the form of bullæ. On the other hand, if we irritate the skin with croton oil, tartar emetic, and several similar agents, the inflammation does not lead to the formation of bullæ, but to that of papules, vesicles, and pustules; in a word, to a series of lesions corresponding to those witnessed in the course of an eczema. Of course, any irritant may produce effects such as these last exceptionally; as on the skin of a person constitutionally predisposed to eczema, although not on that of a healthy person. We are able to call forth both types at will upon healthy skins by the use of different agents; and therefore I am disposed to recognise in these two types expressions of actual phenomena, the principles determining which may be naturally referred to in classifying inflammations of the skin. The superficial inflammations of the skin may be divided into the erythematous or diffusive, when the individual lesions are diffuse, or in patches, and the eczematous or selective, when the lesions are concentrated at points. Such points I believe to be determined either by the presence of cutaneous glands, or by the peculiar arrangement of the capillaries; and these different points of selection—the glands representing the most vascular situations on the surface of the skin—are in reality nearly coincident. A vesicle does not form at the mouth of a gland, sebaceous or sudoriparous, because a gland is there, but simply because such a point is more vascular, and becomes, therefore, more readily a centre of exudation. The varieties of eczema—in enumerating which I have taken no more liberties than have seemed to me absolutely indispensable—are, as in the previous example of erythema, expressive of the stages that would occur, one after another, in an ideal case. Thus, the lesion of eczema at the commencement is a localized macule (Ec. erythematodes); the macule passes into a papule (Ec. papulatum); the papule into a vesicle (eczema of Willan); the vesicle, on giving way, into an excoriation (Eczema rubrum); or into a pustule (impetigo). In the next place the skin becomes infiltrated, while the secretion, if there has been any, dries up (Lichen proper); and the whole process terminates with a desquamation (Ec. squamosum). Now, most of these forms may be assumed from the beginning; or they may follow one another with a regularity more or less complete.

They represent *ideal stages*; but at any of these stages the disease may be arrested and may persist; so that they come to express, not stages only, but *varieties*. The first two stages (grade 1) are dry eruptions: *eczema siccum*. The next four (grade 2) are moist: *eczema humidum*. The last two (grade 3) are again dry, with the exception of lichen agrius, which is a hybrid or transitional form.

ECZEMA ERYTHEMATODES—Indicates, in the first place, a disease to which some authors would give the name of erythema chronicum. It is usually circumscribed; beginning at a point, slowly extending peripherically into a patch, which lasts, with symptoms of redness, itching, and slight desquamation on the surface, for months or even years. It differs, therefore, from an erythema, both in its punctuated commencement and in its long persistence; while it generally occurs in debilitated subjects, and in those who have previously been the victims of eczema in other forms. The expression is also applicable to irregular erythemata supervening during the course of an eczema, and obviously manifestations of the same morbid cause as the eczema itself.

ECZEMA PAPULATUM— Usually the lichen simplex of Dermatologists—is a chronic, dry, papular eruption, more or less diffused over the surface of the body. It has been called "strophulus" in the adult; and chiefly differs, indeed, from erythema strophulus in not running the general acute course of the erythemata. When eczema passes into its moist stages, it occurs as eczema vesiculare; and, on the rupture of the vesicles belonging to this, as eczema rubrum or madidans. The lesion in the one case is a vesicle, formed in connexion with some local peculiarity in the anatomy of the cutis; in the other it is an excoriation. Finally, in eczema humidum, the epidermis is scarcely less liable to become infiltrated than in eczema siccum. In this case the epidermis may become fissured, and from the fissure exudes the peculiar secretion of eczema. It is then the eczema fendille of Devergie and Hardy, which is described in no work in the English language. Nevertheless this is one of the commonest forms of eczema; and as my colleague Dr. M'Call Anderson and myself have long been alive to the necessity of having a name for it, we propose to translate the one bestowed by Devergie, and to call it eczema rimosum.

Lichen.—I hate new names, and I like to preserve established nomenclature when that is possible; but, first of all, I must interpret nature as I find it. Lichen exudativus is really a necessary expression, and one the use of which is sanctioned by the example of Hebra. Lichen simplex has already been discussed, and I let the name remain; it is an eczema papulatum, a lichen as defined by Willan. Lichen exudativus, on the other hand, is something very different from a mere diffuse outbreak of papules on healthy skin; it constitutes the more advanced stage either of a lichen simplex or of an eczema humidum, in which the skin, altered by infiltration is rough, thickened, and fissured. This corresponds closely with the old definition of lichen by both Hippocrates and Galen: "summæ cutis asperitas, cum multâ prurigine, squamis et furfuribus." Lichen exudativus may originate in two ways: (1) from a lichen simplex, the papules forming by their confluence a more or less uniform infiltration of the skin; and (2) from any form of eczema humidum, attended by infiltration, in which the

secretion becomes secondarily dried up. (Vid. Baerensprung, l. c., p. 73.) Eczema rimosum thus passes very readily into lichen exudativus; and lichen agrius, a variety which it is useless to distinguish, represents the transition form between eczema vesiculare and rubrum on the one hand, and lichen exudativus on the other. Lichen ruber is a rare and peculiar affection; for a description of which, as I have never seen it, I must refer the reader to Hebra (l. c., p. 315). Finally, eczema squamosum is the last stage of an eczema, whatever its form may have been, dry or moist; and at this stage the disease may persist for long periods. It differs from pityriasis in its antecedents; and also very generally, in being a desquamation on the surface of an epidermis more or less thickened by infiltration. The deeper epidermic layers are liable to become thickened by a process of infiltration with plastic liquids. When fluid effusion takes place, it is not merely serous, but plastic or purulent; and contributes to a true crust formation on the surface of the skin.

IMPETIGINOUS ERUPTION OF THE FACE CAUSED BY PERIPHERAL IRRITATION of Branches of the Trigeminal Nerve. G ___ , aged 43, a West Indian negro, steward of a ship, was admitted into the Medical College Hospital on the 9th of May, 1870, suffering from great pain in the right side of the face and jaws, owing to a severe impetiginous eruption on half of the lower lip, the upper lip, cheek, inside and out. and extending to the anterior aspect of the ear. The face was considerably swollen; the lymphatic glands were engorged; there was a profuse sero-purulent discharge from the eruption, and some deafness owing to partial occlusion of the meatus auditorius. Two teeth, canine and bicuspid, in the upper jaw were carious and painful; the gums were spongy and tender. Two or three teeth in the lower jaw were also decayed, but not painful. It appears that he has suffered from toothache more or less for the last ten years, and that he had a molar tooth extracted some time ago; he has had facial neuralgia, but no eruption previously. He is otherwise in fair health, and is temperate. The eruption extended from the right half of the lower lip, where it commenced abruptly as though a line were drawn dividing the lip into a sound and a diseased part, to the upper lip, to the inside of the cheek, and from the angle of the mouth, to the anterior surface of the ear, but much less developed as it ascends. The tongue was coated, but not more so on one side than the other. The discharge profuse, and the swelling and pain considerable. It appears that, on the 5th of May, he exposed himself, when heated, to a current of air, and caught cold. Neuralgia came on, and, on the following day, a severe attack of fever ushered in the eruption, which came out suddenly. Simple treatment with salines and quinine, and the application of soda ointment relieved him, but the eruption continued to increase. the 11th May, the two most painful teeth in the upper jaw, canine and bicuspid, were extracted. This operation was followed not only by immediate relief from all neuralgia, pain, and toothache, but by the rapid drying up of the eruption, which in three days had almost completely disappeared. He was discharged on the 23rd completely cured: the eruption had been well for several days, but he remained until his mouth was well. I should note that, on the area of the eruption, on the part of the skin not involved

in the impetigo, several very dark patches of pigment were deposited. This is an example of disease induced over the territory of distribution of part of the trigeminal nerve, by peripheral irritation of one of its branches. diseased teeth were, no doubt, the cause of disturbed nutrition, through the reflex transference of perverted plastic force, and the area of the eruption corresponded to that of branches of the superior and inferior maxillary division of the right fifth nerve. The removal of the canine teeth was followed by immediate subsidence of the disease; showing that they were the proximate cause of the mischief. Irritation of one fibril of a nerve constantly gives rise to pain, or neuralgia, in the site of distribution of other filaments of the same trunk, and there is no more frequent example of it than in facial tic. Disturbance of the formative or plastic force is also not uncommon, as is seen in many cases of the same disease where congestion accompanies pain. But we less frequently see illustrations of this pathological law as illustrated by actual lesions, such as impetigo or eczema. In the Medical Gazette of 1st April, 1867, I recorded a case in which irritation of a branch of the ophthalmic division of the fifth nerve gave rise not only to an impetiginous eruption, but also to destructive inflammation of the eyeball itself. In the present case, happily, the result was less injurious, though quite as illustrative, and was speedily removed by extraction of the offending teeth, which were the seat of irritation. - J. FAYRER, M.D., C.S.I., Indian Medical Gazette, July, 1870.

Poisoning by Carbolic Acid, in a Case of Acute Eczema.—Dr. Fraser. Professor of Medicine, M'Gill University, Montreal, reports in the Canada Medical Journal, July, 1870, a case of poisoning by carbolic acid. patient was eighty years of age, and suffered from acute eczema for five weeks. He was ordered, after he had been a few days in hospital, an ointment containing one part of carbolic acid to four of lard, to be applied on the thighs and arms, and to be covered with oil silk. In an hour and a-half after the ointment was applied the patient seemed to be dying; coma profound, pupils contracted, breathing stertorous, pulse weak, quick, and flickering; whole surface of body livid, extremities cold, unable to swallow, and profound insensibility. The patients in the same ward had seen him half an hour before crawl out of bed, and, after sitting on the chair a few moments, fall to the floor apparently in a faint. It was thought that the extensive application of carbolic acid would account for his condition. So accordingly the dressings were instantly thrown off, and the part washed thoroughly with soap and water. At the same time, sinapisms were applied to his chest and the calves of his legs, and blister to the nape of his neck; brandy was given as freely as it was possible, and a turpentine and castor-oil enema. For the first hour his condition improved rapidly, but as soon as the stimulating effect of the brandy and sinapisms had passed off he seemed to lapse into his former condition. About ten o'clock, he vomited freely, and from that time rapidly regained his consciousness, and fell almost immediately into a natural sleep. The odour of carbolic acid in the vomited matters was distinctly perceptible, but unfortunately none of the secretions were tested. When fully recovered the patient said that a very few minutes after the application of the ointment he experienced

a peculiar burning, prickling sensation over the whole body, and that although he had the greatest desire to micturate he could not pass a single drop of urine. As to the disease it improved with marvellous rapidity, and although nothing was afterwards applied but cod-liver oil, he was pronounced cured on the sixteenth day after admission, and has had no recurrence of the disease since. Dr. Fraser, in a few remarks to the students. stated that the case is instructive in two respects:-1st. As regards the danger incurred by the extensive application of carbolic acid to the skin. when the cuticle is removed, as it always is in eczema, leaving the cutaneous absorbents and capillaries exposed, through which it is readily absorbed, and produces its known depressing effects upon the circulation through the nervous system. These effects have also been occasionally observed to follow its injection into large abscesses. 2nd. As regards its efficiency as a thereapeutical remedy in eczema, in which disease, however, judging from its effects in the present case, it should be employed with caution, or to portions only of the diseased surface at a time, and its effects closely watched.

PRODUCTION OF ŒDEMA.-We suppose that if any of our readers were asked what would be the effect of suddenly applying a ligature to the principal vein of a limb, or in any other way arresting the return of the blood through it, the immediate answer would be, that congestion would occur, which would relieve itself by serous exudation through the coats of the vessels; or, in other words, that cedema of the whole limb below the point at which the circulation was arrested would take place. it were further urged that cases daily come under observation in which particular veins have become obliterated by the pressure of tumors or what not, and yet that such obliteration is not followed by any ædema or dropsical accumulation, the stereotyped reply would be, that in such cases the retardation of the blood current had occurred so slowly that sufficient time had elapsed to enable the collateral channels to become dilated, and to convey by a thousand smaller vessels the blood which was previously transmitted by one. At a recent séance of the Académie des Sciences, however, M. Ranvier adduced certain experiments which, if they do not absolutely disprove the ordinarily received views, at least are strongly suggestive of the suspicion with which we should regard all traditional dogmas, however high the authority by which they are supported. The views above-mentioned seem to date from the experiments made by our countryman, Richard Lower, who, in his "Essay on the Heart and on the Colour and Movement of the Blood," first showed that tying the vena cava was followed by ascites, and ligature of the jugular veins by cedema of the head, with copious flow of saliva and tears, resembling, as he says, the salivation produced by mercury, terminating in two days in suffocation. Although apparently conclusive, these experiments were not universally accepted, and even so recent an observer as Hodgson, states that he had seen several instances in which the femoral vein was obliterated, and one in which it was included in a ligature, without any unfavorable consequence. In 1823, M. Bouillaud, in an important mémoire that was published in the Archives Génerales de Médicine, again took up the views of Lower, and corroborated them by the details of cases in which, when ædema affected a certain portion of the body, he found the

corresponding vein obliterated either by a tumor or by a clot which had formed after delivery. From the period when this memoir appeared the general impression has been that the obliteration of the principal vein of a part sufficiently accounts for edema into its tissue. M. Ranvier, however, appears to have been dissatisfied with the accepted views on the subject, and proceeded to repeat the second experiment of Lower. He tied the two jugular veins at the inferior part of the neck in a dog and in a rabbit. To his surprise, however, these animals presented no discharge of tears, no salivation, nor any edema of the head. In other experiments he ligatured the femoral vein immediately below the crural ring in the dog; but here again no ædema occurred either on the day of operation or at any subsequent period. These results, consequently, were in accordance with those observed by Hodgson in man. Lastly, he applied the ligature to the inferior vena cava, but still no edema occurred. He then conceived the idea of favoring the production of dropsy by paralysing the vasomotor nerves, and, recalling the experiments and observations of M. Claude Bernard, he divided the sciatic nerve on one side in a dog, whose vena cava inferior had previously been tied. On this side a considerable degree of ædema immediately supervened whilst the opposite hind limb remained in its ordinary condition. This remarkable experiment was performed three times, and on each occasion with the same results. From these experiments M. Ranvier believes that he is justified in concluding that mere ligature of the vein does not, in the dog at least, produce cedema; but that after obliteration of the veins, dropsy may be caused by section of the vaso-motor nerves. same probably holds good in the case of man, and it is easy to comprehend how important are the practical results that may follow the application of this view.—Lancet.

Waxed Paper as a Substitute for Oiled Silk.—Drs. Agnew and Hewson, of the Penn. Hospital, used waxed paper as a cheap and efficient substitute for oiled silk in surgical dressings. Ordinary thin tissue paper is passed once through melted wax and dried, when it is ready for use.

TRICHINÆ IN THE DOMESTIC FOWL.—Dr. G. S. Bryant reports having found embedded in the stomach and intestines of the hen large numbers of entozoa, coiled in cysts in every possible attitude, and not unlike the trichinæ found in the human muscle. He suggests that the disease known as "chicken cholera" is dependent on the presence of these entozoa, and promises to continue and report investigations on this subject.

Banting's System a Cause of Bright's Disease.—Dr. Thos. Clemens, of Frankfort, reports three cases of his own, in which the patients had carried Banting-ism to an excess. So insidious was the invasion of the renal disorder, that when the patients first applied for medical aid the symptoms of Bright's disease fully developed were found in each instance. All the cases were fatal, and each was accompanied with a fatal and profound disarrangement of the whole system, associated with symptoms referred to the brain and cord. Dr. C. believes that a tendency to the disease is caused by the loss of the fat of the kidney, together with an excessive supply of albuminous material in the blood.—Chemical Gazette.

ELIXIR OF CHLOROFORM.—The following Elixir of Chloroform is recommended by the Pharmaceutical Association at Washington:—

Be Chloroform, tinet. opii, tinet. camph., sp. ammon. ar., aa. \(\frac{1}{3} \) iss; Oil of cinnamon, \(\mathref{m} \) xx; Brandy, \(\frac{1}{3} \) ij.

Dose—Half a fluid drachm, more or less.

M.

BLISTERING PAPER.—White wax, 8 ounces; sweet oil, 4 ounces; spermaceti, 3 ounces; turpentine and powdered cantharides, of each 1 ounce; boil for two hours, with constant stirring, in 10 ounces of water; strain through flannel, and, while hot, spread it on paper.—Journal of Applied Chemistry.

COLD CREAM.—J. B. Moore, Philadelphia (the *Pharmacist*), recommends the following recipe as very superior:—

Take of Oil of sweet almond, 10½ fluid ounces; Spermaceti, 3¾ troy ounces; White wax, 10 drachms; Otto of rose, 6 to 10 drops.

Melt together, by means of a water-bath, the oil, spermaceti, and wax, and strain through muslin, if necessary; stir constantly until it begins to thicken; then beat it well, and when it has become quite cool add the otto of rose, and continue the beating till the oil is thoroughly incorporated, and the ointment is of snowy whiteness.

Beautifiers.—It is simply enough to make the hair stand on end, if it don't make the hair grow, to learn what dangerous substances are vended for tonics, washes, colour-restorers, &c., for that portion of the economy. The Journal of Applied Chemistry, in a late issue, says that not less than sixteen popular hair tonics, washes, and restoratives were examined recently, only one of which was free from lead—a majority contained this metal as an essential constituent—some of them having as much as 16 grains of lead to the fluid ounce. The lotions and washes for the complexion were nearly all free from injurious metals, and the probability is that the purchaser pays dearly for some dirty water with which to improve his skin. Pure water would be better, and at the same time cheaper. The enamels for the skin consist of white powders suspended in clear liquids. On standing, the powders subside, but agitation quickly incorporates them with the liquids again. The white powder is generally carbonate of lead; in some instances carbonate of lime and zinc are employed. It would thus appear that houses and faces are painted with the same material; houses may endure, but complexions are ultimately ruined by such treatment. White powders for the skin were found to consist of carbonate of lime or French chalk, and are injurious in closing the pores of the skin and preventing perspiration.—Medical and Surgical Reporter.

Morfit's Hair Dye.—Scald black tea, two ounces, in one gallon of boiling water; strain, and add three ounces of glycerine; tincture of Spanish flies, half an ounce; and bay rum, one quart; digest the mixture for two or three days, and perfume with essence of rose or bergamont, or any other favourite essence to suit the taste.—Ibid.

From the Glasgow Medical Journal, August, 1870, we extract the following "Notes of Practice in Samoa," by Dr. George Turner:—"The most common skin affection which I have seen is Framboesia, or the yaws. In this disease I have found that most reliance is to be placed upon mercurials—calomel or hyd. c. creta. A few doses made the pustules shrivel up and disappear, but whether the cure is permanent or not I have not yet been able to determine. I thought it was till recently, when one or two old cases, in which the pustules had entirely disappeared under the use of mercury, again made their appearance with a new crop springing up. Next in frequency comes eczema rimosum. This affection, as well as warts, is very often met with on the soles of the feet, caused by the constant irritation in walking barefooted on the roads, and wading in the lagoon, treading on coral patches, &c. The cracks cause very great pain, and are of course very difficult to heal. I have found liq. arsenicalis the most effectual drug in these cases, and at the same time I always endeavour to impress upon the natives the necessity of wearing shoes or sandals, as no medicine can benefit the affection so long as the feet are continually exposed to the irritation. Following these affections in order of frequency come ringworm, with Lichen tropicus. In the latter affection oxide of zinc ointment with a gentle aperient seems in nearly all cases to afford almost immediate relief. Pityriasis versicolor is very common. All such affections are difficult to cure among the natives, on account of their skins being so saturated with oil that any lotion runs off. So in this case I have tried lotions of carbolic acid and corrosive sublimate, but with no effect. It speedily yields, however, to the ungt. hyd. iod. rubri. There is one affection which has puzzled me very much, and which deserves especial notice. I have seen five cases of it during the year, and have set it down as herpes desquamans. The first case of it I saw I at once thought was a case of ichthyosis, but a closer examination showed me that it was neither ichthyosis, nor any other disease which I had before seen. The Samoans call it lafa tokelau, or tokelau ringworm, and say that it is a new disease among them, having recently been introduced from Tokelau or Bowditch Island. There is at present in the Institution here a native of Bowditch Island, and from him the following interesting particulars were obtained regarding this curious disease. It was unknown at Bowditch till about ten years ago, when it was introduced by a man, copper coloured like themselves, and said to be a introduced by a man, copper coloured like themselves, and said to be a native of Tamana, one of the Gilbert Group, who landed from a whaler that called there. His name was Peter, and hence the disease is called at Bowditch Le Pita—the Peter. It prevails among natives of both sexes, young and old, and is markedly contagious. No remedy is known for it except the moxa, which they apply at any spot where it seems on the point of breaking out. It is said, however, that if left to itself it occasionally dies out after a time. It is a scaly disease—much more like ichthyosis in its general appearance than any other disease with which I am acquainted. The scales however, differ from those of ichthyosis in that they are not The scales, however, differ from those of ichthyosis in that they are not disposed in squares. They run in concentric circles, and may be well represented by taking a sheet of stout cardboard and shaving the upper layer of it in such a way as to make it curl up in circles. The rings of desquamated cuticle are about a quarter of an inch apart. There are few cases of it to be met with on this island, but on the adjacent island of Tutuila they are more common. The natives have a very wholesome dread of it, and many of them, if they fancy they see it appearing on any part of the skin, cut out the affected portion or destroy the skin with the moxa. As stated above, it is very contagious, running through whole families.

CEREALIN.—For several years various plans of treatment had been tried at the Ulster Institution for Deaf and Dumb for the purpose of preventing the ravages of scrofula, but without success. In 1862, it was determined to try linseed in the manner hereafter mentioned, it being well known to contain a large amount of oil and excellent nutritive matter for producing fat. In the year mentioned linseed was first used as a dietetic agent combined with bran, Now it has been estimated that as much as 12 per cent. of nutritious matter is

contained in bran, and which is commonly called gluten; but M. Mége Mouries has found this substance to consist of a vegetable ferment or metamorphic nitrogenous substance, which he has named cerealin, and another vegetable substance called *casein*. The former, which I may call the active principle of bran, is obtained by washing bran with cold water, in which fluid it readily dissolves, and may be precipitated by alcohol; as contained in bran it is an active ferment on starch and glucose, producing the lactic and butyric changes, but never alcohol. This substance then being a special solvent of starch and gluten, and a good tonic to weakened digestion, was on account of these reasons combined with linseed, as in the following formula:—Take of linseed half an ounce; fine bran, one ounce; water, one quart; boil for two hours and strain; then add beef from half a pound to a pound, and make into soup. This soup is given at dinner four days in the week to all the pupils, and since its use began strumous complaints, chest affections, and dyspeptic attacks have not been so frequent.—Dublin Quarterly Journal of Medicine, May, 1865.

Books Receibed.

RETURNS of the Lunatic Asylums and Workhouses in the Counties of Cork and Limerick, in which Turkish Baths have been erected.

THE PATHOLOGY OF ALOPECIA AREATA. By E. A. Duhring, M.D. (Pamphlet.)

REGULATIONS OF THE SCHOOL OF PHYSIC IN IRELAND.

ON HOME-GROWN PODOPHYLLUM AND JALAP. By Walter G. Smith, M.B. (Pamphlet.)

(do.)

HOW HUMAN BEINGS ARE AFFECTED WITH MANGE. By E. Spratt.

THE LIVERPOOL MEDICAL AND SURGICAL REPORTS. Vol. IV. London; John Churchill & Sons.

THE MEDICAL WORKS OF FRANCISCO LOPEZ DE VILLALOBOS. Translated by George Gaskoin. London: John Churchill & Sons.

PHOTOGRAPHIC REVIEW OF MEDICINE AND SURGERY. No. I. Philadelphia: J. B. Lippincott & Co.

THE ANATOMY OF A CASE OF MOLLUSCUM FIBROSUM. By C. Hilton Fagge, M.D. (Pamphlet.)

"The California Medical Gazette," "The American Journal of Dermatology and Syphilography," "The New York Medical Gazette," "The Glasgow Medical Journal," "The American Journal of Medical Science," "The Dublin Quarterly Journal of Medical Science," "The Medical and Surgical Reporter," "The Canada Medical Journal," "The Medical Mirror," "The Irish Farmers' Gazette," "The Madras Medical Journal," "The Boston Medical and Surgical Journal, "The Buffalo Medical and Surgical Journal," "The St. Louis Medical Journal," "The Canada Lancet," "The Medical Record," "Journal of the Gynæcological Society of Boston," &c., &c.

Hotice to Correspondents.

J. H.—Although foreign to the object of this Journal, we will endeavour to describe the hoods of the different Universities. We believe the following to be pretty correct:—Oxford—B.A., black silk, lined with white fur; M.A., black silk, lined with crimson; D.C.L., black silk, lined with blue; B.D., black; D.D., scarlet cloth, lined with black silk. Cambridge—B.A., black, lined with lambs' wool and rabbit-skin; M.A. (regent), black, lined with white; nor-regent, black; B.D., black; D.D., scarlet, lined with pink. Durham—M.A., black silk, lined with lavender. London—B.A. and M.A., black silk. Dublin—B.A., black, lined with white fur; M.A., black silk, lined with blue; M.D., scarlet cloth, lined with rose silk; LL.D., red cloth, lined with white; D.D., black, lined with red; Mus. Doc., red, lined with white fur. The Queen's University in Ireland has the same hoods as Dublin. We perceive, from the Glasgow University Calendar for 1869-70, that the following hoods are now authorised to be worn by graduates of that University:—M.A., black silk, lined with red purple silk; LL.D. and D.D., black velvet, lined with black silk; M.B., black silk, lined with black velvet, lined with red silk; B.D., black silk, border with black velvet, lined with red purple silk. Dr. Damon.—Thanks. Your paper will receive insertion in our next number.

Dr. Damon.—Thanks. Your paper will receive insertion in our next number. MR. LAWSON TAIT'S paper in our next.

JOURNAL OF CUTANEOUS MEDICINE,

AND

DISEASES OF THE SKIN.

NOTE ON FRAGILITAS CRINIUM.

By Henry S. Purdon, M.D., L.R.C.P., Physician General Hospital, and to the Hospital for Skin Diseases, Belfast.

In my book on "Neurotic Cutaneous Diseases," I mentioned a condition of the hair sometimes met with, under the name of Fragilitas Crinium. The object of this brief communication is to offer one or two additional remarks on the diseases which occasion alteration and brittleness in the hair.

This affection is generally met with on the scalp and face; the diseased hair is uneven in length, fissured longitudinally, extremely dry and broken in various directions, or exhibits little knots at different intervals, which, when pulled, give the fractured part the appearance of a miniature brush. No parasitic growth can be detected by microscopical examination; frequently the skin of the affected part desquamates in brany little plates, owing, no doubt, to impaired nutrition; the hair-bulb, moreover, is atrophied. Such are briefly the usual appearances presented. The remaining varieties of the complaint—if such it can be called—arise from the following causes, viz.: Syphilis, alopecia areata, parasitic growths, and hair dyes.

Syphilis.—Professor Erasmus Wilson has described a syphilitic disorganization of the hair—(Journal of Cutaneous Medicine, vol. iii., p. 309). It is a nutritive affection, due to organic change in the structure of the hair, proceeding from syphilis. The characteristic appearances presented may be summed up as follows:—The hairs are blackened in various parts, no matter what the original colour may be; if pulled or combed, they break short off at the discoloured spots. These little protuberances have the appearance of being composed of a dark cylinder.

Mr. Wilson states that the fibrous sheath of the hair is lost, and in place thereof a dark grummous looking substance is observed. "The essential peculiarity of structure in the diseased hair is the arrest of development of the fibrous portion at its cellular stage . . . the morbid structure being an expansion of the medulla."

Alopecia areata.—Dr. Duhring (American Journal of Medical Science) describes the appearance of the hair in alopecia areata (which disease he regards as non-parasitic) as follows:—" If a patch be examined when the disease first shows itself, the hairs are seen to be fewer in number than normal and diminished in bulk, intermingled with little short broken-off hairs scattered here and there over the patch." These broken hairs, when extracted, come out of their sheath without any resistance, but are usually brittle. Under the microscope, they are observed to terminate abruptly in a club-shaped extremity. The hair bulk, according to the same observer, is contracted, shrivelled, and atrophied, being surrounded with only a scanty supply of sebum and epidermic cells. The shaft of the hair approaching its free end is gradually distended, ending in an oval swelling, furnishing a broken, rugged extremity. This bulging, Dr. Duhring thinks, is due to the following, viz .: - The shaft not receiving its proper supply of nourishment at its extreme end, suffers most, and consequently does not thrive; the filaments not being sustained as usual, and losing their vitality, tend to separate and disintegrate, thus stretching the epidermic membrane, and causing the appearances described; the disease being due to "a paralyzation of nerve-force, the bulb suffering first."

From Parasitic Growths.—The characteristic appearance of the broken, brittle, and stumpy hair of tinea tonsurans is well known, and need not be further mentioned. The dry and peculiar look of the hair in favus is also easily recognized. Affections clearly due to a fungoid growth occasioning a change of texture in the hair.

From the use of Hair Dyes.—Many hair dyes, as is well known, both by the public and the profession, are injurious to the hair, altering its texture and interfering with its proper nutrition,—indeed, their use has frequently given rise to more or less inflammation of the skin. I lately met with a case where a lady had been using the peroxide of hydrogen (one would think a harmless remedy) for producing a golden shade

of the hair so much admired at present. It, however, produced this result, that the hair, which was very fine and soft, became of a somewhat golden colour, but also began to lose its soft, silky feel; in place thereof was substituted a dry, brittle, and easily broken condition of the hair, which likewise came out in considerable quantity, a result that may be attributed to the use of the peroxide of hydrogen, upon discontinuing which, and substituting a liniment of castor oil, tincture of cantharides, and tincture of nux vomica, entirely disappeared.*

The only other point worthy of note is, that the habitual use of a sharp-toothed comb frequently causes a fragile condition of the hair, probably due to the external sheath of the hair being injured.

I had purposed to give a few wood-cuts of the conditions referred to, but, owing to unavoidable circumstances, must defer them till another opportunity. Erasmus Wilson, in his "Catalogue of the Dermatological Specimens" contained in the Museum of the Royal College of Surgeons, London, calls the disease under notice *Trichoclasia*, and makes mention (461) of an engraving of a hair, from a drawing by Dr. Beigel, representing the shaft partially broken through at certain parts; also (462), "Portion of hair affected with Trichoclasia, taken from the beard, the usual seat of the affection."

* At a late meeting—February 3rd, 1871 -of the Chemico-Agricultural Society of Ulster, the Chemist to the Society, and Professor of Medical Jurisprudence, Queen's College, Belfast (Dr. Hodges), said he had made analyses of a great number of what the different agents sold as hair dyes, and recommended in innumerable newspaper paragraphs as possessing world-renowned properties. Several of the dyes, he found, were merely solutions of nitrate of silver, used generally with a solution of an alkaline sulphuret: while the hair restorers consisted of sulphur in powder diffused through a solution of acetate of lead, to which perfumes and a little spirit were added. These compounds were believed to dye hair brown or black; but the circumstance of washes containing salts and lead had in several cases caused all the symptoms of lead poisoning. Some of these dyes were sold at exorbitant prices; for instance, one lady sent him a bottle, for which she had paid half-a-guinea, the ingredients of which he found were not worth more than a couple of pence. Many dangerous preparations of pearl powders, occasionally used as cosmetics by ladies, should be carefully avoided. These almost invariably contained white lead; and a severe and dangerous case of lead poisoning occasioned by their application was some time ago referred to him in Belfast. The public should know that these preparations were not the harmless powders they were supposed to be.

SOME ABNORMAL CONDITIONS INCIDENT TO INFLAMMATION OF THE SKIN.

By Howard F. Damon, M.D., Physician, Department for Skin Diseases, Boston City Hospital, U.S.

THE impulse given to modern dermatology by such writers as Wilson, Hebra, Hardy, and others, has created an interest in the subject which was hitherto wanting in the medical profession. Already the fruits of their observations and writings have accumulated to such a degree as to require the special attention of the student and practitioner of medicine, in order to obtain a knowledge of them adequate to the necessities of the age. An intimate acquaintance with the various works on this subject requires so much time, and is often obtained at such sacrifices and expense, that but few physicians have entered this interesting domain of medicine, either as investigators or practitioners. Daily familiarity with the teachings and practice of this branch of medicine will be sufficient excuse for us, if we venture to advance a few opinions in regard to certain abnormal appearances associated with, or intimately dependent on, some inflammatory affections of the skin.

The fashion of inventing a new name for any unusual variation in the congestive or exudative processes is not without its disadvantages, however much it may appear to enlarge the boundaries of knowledge. The change, also, of established names, or their erroneous application, helps to confuse a subject already complex in its simplest aspect. Our efforts to revive the nomenclature of ancient writers on this subject will prove more or less abortive, from the interminable difficulties that beset such an undertaking. Let us, then, be content to use such words as erythema, eczema, lichen, &c., in the sense in which they have been employed by the best writers of modern times. None of these epithets should have its meaning so distorted or perverted that it will easily cover a multitude of morbid conditions that would be with as much propriety described under other names. Let us rather study the morbid condition itself in detail, and see whether it is entitled to a specific appellation, or must be considered only an accidental feature of the disease. If we find the same phenomenon present at times in several entirely different diseases, and without constituting an essential feature of any one of them, we are warranted in regarding it as anomalous; and the epithets associating it with these diseases, in such a way as to make new varieties, must be considered innovations. As an illustration of the point in view, let us mention the fact that in many cutaneous inflammations there is the liability to hæmorrhage, ædema, or even gangrene of the skin. the occasional occurrence of these accidents, such terms have been invented as hæmorrhagicum, ædematosum, and gangrenosum. They do not, however, denote any specific differences in disease, but rather they are expressive of phenomena attendant on many inflammatory affections of the skin, where the morbid process is so intense, or the organ or special tissue so weakened, that its sanguineous or serous contents escape, or death even overtakes it.

Hæmorrhage into the skin, such as occurs in purpura, is not included in the above category, since we are only speaking of hæmorrhage as a complication of inflammatory affections of the skin. Furthermore, as regards purpura, we do not deem it essentially a skin disease, but rather it is a general dyscrasia affecting the vascular tissues, and which is often only apparent to us from this obvious mode of manifestation.

Let us first consider those inflammatory conditions of the skin in which hæmorrhage is known sometimes to occur.

In the early or congestive stage of inflammation, when the morbid process takes place in limited areas, as in lichen simplex, there is an occasional rupture of the minute blood-vessels of the derma, giving rise to the appearance known as lichen lividus vel hæmorrhagicus. This we have observed most frequently on the forehead, in cases of hyperidrosis, or excessive sweating of that region, in infants and debilitated persons.

There is a variety of urticaria denominated "lichen urticatus," in consequence of a papule remaining in the site of the small oval or circular wheal, as the result of exudation. Instead of this papule, a bulla is occasionally formed, into the floor of which hæmorrhage occurs, in consequence of rupture of some of the vascular loops in the papillary layer of the derma. Thus we have conditions expressed by the terms urticaria bullosa and urticaria bullosa hæmorrhagica. Both the serous effusion and

hæmorrhage are accidental, and therefore not essential characters of this variety of urticaria.

Erythema papulatum is, in rare instances, attended with hæmorrhage into some of the papules. We have denominated this condition erythema papulatum hæmorrhagicum. The name sufficiently explains itself.

It is already known, we suppose, to most dermatologists that there is more or less hæmorrhage into the nodular elevations of erythema nodosum. It is these extravasations of blood which produce those decidedly ecchymotic spots or patches in the site of some of the nodes. When the colour of the part indicates the presence of effused blood in the early or flourishing stage of erythema, we have denominated the case erythema nodosum hæmorrhagicum.

Ecthyma luridum is a hæmorrhagic, and often gangrenous variety of disease. We have seen the two forms on different parts of the same individual. This rare and fatal disease was, in this case, of syphilitic origin. If the epithet hæmorrhagicum is applicable to certain abnormal deviations in the above diseases, it is as a conventional term only, or a reminder of an accident to which they are all at times liable.

Having spoken of hæmorrhage as a complication of certain inflammations of the skin, our next object will be to ascertain to what extent and in what diseases ædema, or serous infiltration, becomes an accidental attribute. Œdema is not natural to the erythemata, but nevertheless does occur in erythema læve and erythema tuberculatum. In such instances, the lower extremities are affected by the ædema coincident with the erythema, but not always necessarily from that cause.

Eczema is far more likely than the erythematous process to give rise to edema, from the extension of the exudative process to the areola tissues of the skin. Eczema of the leg, especially if the discharge is only moderate in quantity, and the disease is of long continuance, may result in serous infiltration, and even hypertrophic thickening of the integument, producing a condition like the Barbadoes' leg; but from which the patient may eventually recover, under proper hygienic conditions and treatment. After absorption of the newly-formed tissue-material, these legs still present a condition of the skin which somewhat resembles ichthyosis. Extensive vaso-motor paralysis very often takes place in chronic eczema of the leg; and it is this state

which constitutes much of the redness in eczema rubrum. The redness generally comes on after an abundant escape of the serous fluid, and at the period of encrustation and repair. Masses of epithelium are cemented together by the effused serum, and become dark brown or black from exposure to the air. Crusts also contain pus, and are of a yellow or dull green colour. Such crusts are often broken into quadrangular masses on the ankle and dorsum of the foot, where they have a papillated appearance. When forcibly detached, there is sometimes bleeding. In this stage of the disease, the worst form of eczematous ulcer sometimes occurs. These excavated ulcers, which are usually situated about the ankle, seem in some instances to be an additional provision for the drainage of the infiltrated tissues.

From the above considerations, we conclude that the terms hæmorrhagicum and œdematosum should not be regarded as expressive of specific differences or varieties of skin diseases.

ON ACQUIRED SYPHILIS.

By William Wilson, M.D., M.CH., Q.U.I.

HAVE to submit to the profession the following notes of an extremely interesting case of acquired syphilis which came under my notice while acting as "locum tenens" for the assistant-surgeon in the County Down Infirmary.

It will be seen from the notes of the case that it favours the view which Ricord entertained—viz., that a wet-nurse may contaminate the infant to which she gives suck through the medium of her milk. Acton denies the possibility of this; but the following case is strongly in favour of Ricord's views. Another vexed question is resuscitated in this case—i.e., whether or no a syphilitic child can infect a healthy nurse. Both Ricord and Acton deny the possibility of this; whereas Hunter and Lawrence cite cases in which it has occurred. Rollet, in his report, "Recherches Cliniq et Expêriment sur la Syphilis," as quoted by Lancereaux in his "Treatise on Syphilis" (vol. ii. p. 246 et seq.), maintains the view of saliva acting as an infecting medium. The case related by Rollet is so interesting that I am sure I will be excused for quoting it here. "A young

woman of irreproachable morals contracted syphilis, the first manifestation of which was a chancre on the lips. After questioning the patient in the presence of her mother and husband, Rollet came to the conclusion that the disease had been communicated by the cook. The latter, who had been ill for eight or ten months, had the isthmus of the throat occupied by confluent mucus patches, and the young lady was in the habit of tasting all dishes prepared by her servant with the same spoon, and immediately after her."

In the case which I am about to quote, there is the most striking similarity, in the means whereby the syphilis was transmitted, to the above case of Rollet's.

Case.—Biddy M'Veigh, æt. 33, married, by occupation housewife, living at Kilkeel, was admitted into Downpatrick Infirmary on December 8th, 1870, and placed under the care of Dr. Maconchy for secondary syphilis. Also, at the same time, her four children-viz., Maryanne, æt. 11; Eliza, æt. 7; William, æt. 4; Biddy, æt. 1—were admitted for the same affection. The mother stated, on admission, that she had been labouring for some time under sore throat, but that she had been taking medicine for it, and that now her throat was almost quite well, and that she only wished admission to look after her children. On examination, the tonsils of the mother were found to bear the marks of superficial ulceration, but there were no signs of inflammation, and she did not complain of any pain. The children were all found to be labouring under ulcerated sore throat, the tonsillitic ulcers having the bi-symmetrical character and gouged out appearance peculiar to specific sores. tion, all the children had those serpiginous patches round the margin of the anus which are known as condylomata. None of the family had any other affection, with the exception of the youngest child-Biddy, æt. 1-who had small superficial ulcers about the angles of the mouth, roseola over the lower two-thirds of the nose, and laryngitic symptoms; also, aphthous-looking spots on the tongue. The mother complained of nothing, nor did she present any symptoms of the disease except the condition of the throat before referred to. The eldest child, Maryanne, had ulcerated sore throat of a more virulent character, and condylomata larger and more irritable than the rest of the family. With these exceptions, there was no difference of any moment in the symptoms between the rest of the members of the

family. The youngest child, in consequence of its present constitutional disorder, looked very debilitated; the others were strong, tolerably healthy looking children, full of animal spirits.

On inquiry, the mother stated that the youngest child was the first to be affected. That it was, on the day of its birth, a fine healthy child; and that on that day her sister-in-law-a married woman—gave the child the breast on two separate occasions. She (the mother) being told by a neighbour that her sister-in-law was labouring under the "bad disorder" having been smitten by her husband—took the child from the sister-in-law, and never again allowed her to suckle the child on any other occasion. From that time her child remained quite healthy, and sucked well for nearly a month; but when the child was close upon being four weeks old, she observed it becoming very cross and irritable, and she began to find great difficulty in inducing it to take the breast. About this time also-four weeks after birth-she observed spots coming out over the child's body of a dark red colour, and about the size of a pea, which "never came to a head"—i.e., never became purulent or serous. On seeing the eruption she got alarmed, and consulted a medical man, who gave her a salve and medicine; persevered in the use of the salve and medicine, and the spots disappeared in three months. About two months after she first saw the eruption, she observed the sores about the child's anus. Her medical man being consulted about these sores, pronounced them syphilitic, and ordered her to apply the "black wash" to keep the parts clean, and to give the child spoon diet, as the amount of nourishment it—of itself—was able to derive from the breast was inadequate for its sustenance. When the infant was two months old, she (the mother) observed two large flatlooking dark red spots on her breast—one on each side of the nipple of the breast she was accustomed to apply the child toand shortly after she took a very bad sore throat, and used to spit out "matter" from it which had a bad taste and smell. was nearly nine months before her throat was well, although during the whole of that time she had been under medical treatment. She states that she did not suffer from anything except the sore throat and the two spots on the breast.

The eldest daughter was accustomed to spoon-feed the youngest child, putting the spoonful of pap through her own mouth, in order to test whether or not it was too hot, &c., &c.,

before introducing it into the mouth of the child. When the whole spoonful was not swallowed by the child, she ate herself what it had left, before replenishing the spoon. Eliza and William, the other two children, were accustomed to receive spoonfuls of pap while the infant was being fed; and they came in generally for what was left on the spoon, after being passed through the child's mouth.

About five months after she first commenced to feed the child—as nearly as the mother can remember—Maryanne, the eldest daughter, complained of sore throat, and shortly afterwards showed her mother the condylomata round the margin of the anus. About three months after the eldest first complained, the other two children—Eliza and William—also became affected with sore throat and condylomata. None of the children, with the exception of the youngest—who had roseola of the nose and small flat reddish "spots" over the body—had had any skin affection whatever; nor did the three eldest complain of anything except the throat affection and the condylomata.

Biddy M'Veigh (the mother), on being interrogated, stated that she had two children living at home with their father—one a boy, nine years old, and the other a girl æt. 5. Neither of these children have, up to the present time, shown any symptoms of the disease. The mother states that the boy—who was very "old fashioned"—always refused to partake of the pap with which the infant was fed; he considered himself quite a man, as he was accustomed to work in the fields with his father. She does not know how the other child escaped the infection. She thinks that the latter did not get any of the infant's food, but is not altogether clear on this latter point.

At the time the sister-in-law gave suck to the child, the mother saw her breast, and there were, in her opinion, neither "sores," "spots," nor anything else the matter with it; it was, in short, in her opinion, a healthy enough looking breast. She never heard from any one that there was anything wrong with her sister-in-law's breast. On being questioned, Biddy M'Veigh asserted, in the most positive manner, that her husband never had venereal disease; that he was, in fact, a "very good living man." The husband also supported, with the most solemn asservations, the wife's statement as to his never having had venereal disease.

Biddy M'Veigh is a short, muscular, slightly swarthy woman,

and pretty healthy looking. She is intelligent, and her statements bear the impress of truth. At present she has been three months pregnant.

The whole family improved steadily under Dr. Maconchy's mercurial treatment, and at the present time (Jan. 5th, 1871) they are so far recovered as to be almost in a condition to leave the Infirmary.

On perusal of the above case, it will be noted that the youngest child became contaminated by a person who, as far as we can learn, had no cracks about the nipple, or excoriations of any other part of her breast, although labouring under constitutional syphilis at the time she gave suck to the child; and (2) That the child communicated syphilis to the mother, who had no abrasion on any part of her breast. That syphilis must have been communicated to the child through the medium of the milk, and the child infected the mother through the medium of the saliva. It will also be noted, that the eldest daughterwho had her mouth more constantly in contact with the spoon by which the child was fed-had more severe symptoms, and an earlier manifestation of the action of the syphilitic virus, than any of the other children; and, lastly, it will be noted, that the virus manifested its presence in all the members of the family, not by a primary sore, but by secondary symptoms.

ON THE PATHOLOGY OF ICHTHYOSIS.

By Lawson Tait, F.R.C.S., BIRMINGHAM.

My own experience has been limited, and the views, therefore, that I advance would not of themselves have much weight, were they not consistent with those of the well-known dermatologist of Guy's, Dr. Hilton Fagge. It has been the fashion of late years to invent such an astounding number of new names and new systems of classification for skin diseases, strange in their orthoepy and in their orthography, that all but special surgeons have been afraid to venture on ground where the paths of their boyhood were all ploughed up, and all the old landmarks gone. The change may have its advantages, although, as yet, little is

apparent but confusion, and some of the alterations have not been happy: as an illustration, I may give those introduced by Mr. Erasmus Wilson in the nomenclature of Ichthyosis. The pathology on which he founds his alterations of name, and classifications of the varieties of this disease, are not, I believe. sound. He proposes to substitute the word Xeroderma for Ichthyosis,—and for no better reason that I can discover than a wish for novelty. The skin in Ichthyosis is not by any means withered or dried up; on the contrary, it is often as moist as in cases of eczema,—and, in some cases, profuse perspiration is one of the most distressing symptoms. Xeroderma is much more applicable as a name for the dry skin of old age, and the two divisions of X. simplex and X. ichthyoides do not seem determinate enough to constitute varieties; the term Ichthyosis, moreover, is sanctified by long and universal use, and must not be cast aside without sufficient reason, even on the high authority of Mr. Wilson. It is, however, to the name of his third variety, and to his views of the pathology of it, that I wish to take most serious exception; and this I should not have done thoroughly convinced, as I have been for some time, that I had good grounds for doing so-had I not been supported by the observations of Dr. Fagge. Mr. Wilson's third variety is Xeroderma saurioides (Ichthyosis spuria ad sebacea), and is described as an altered state of the sebiparous function, and an accumulation of the sebaceous substance on the skin, in the form of dark grey or greenish scales or spines: he names it spuria, to contrast it with the other two, which together, I suppose, constitute the vera. In my experience, this condition of the skin in a modified form, consisting of brownish or dirty grey patches of small size situated on rough skin, has not been unfrequent; for in stripping dispensary patients for physical examination, I have very often met with patches of it on the back, more especially between the scapulæ and over them and on the outside and back of the arms. The patients have almost always told me that it disappears in Summer and reappears in Winter; that they suffer no inconvenience from it; and it always appeared to me that uncleanly personal habits had no special influence in its production. In only one case have I met with it in a very aggravated form, but records of such cases, resembling in every respect that which I shall relate here, may be found in numbers. My patient, Henry S-, æt. 14, came

under my care for another affection, and it was only in stripping him that I discovered his skin disease. All over his body, except on his head, neck, and hands, the skin was rough, chequered, dry, and scaly; but those exposed parts were quite normal, and gave no indication of his diseased condition. When I first saw him it was mid-Winter in 1868, and his mother told me that the disease was then at its worst, that it would begin to disappear in May, and that by Midsummer his skin would be free from discolouration, but not from roughness; at the beginning of Winter it would again appear, and increase until it regained its greatest intensity. It appeared on him first when about five years of age, as it did on his father, on his father's brother, on his own elder brother, and on another brother younger than himself. The grey scales are most abundant on the anterior wall of the abdomen, the front and outer part of the arms, the fronts of the legs, inner sides of the knees, and are copious over the back; but there is no part of the body, save those mentioned, which can be said to be free from them. They can be picked off only with difficulty, and some pain, and, when carefully examined, are found to be composed entirely of strata of closely-packed epitheliam cells, which are easily demonstrated by the addition of liquor of potash, but are quite unacted on by ether. It is perfectly clear, then, that there is nothing sebaceous about those scales—in fact, their anatomical distribution at once negatives any such view of their pathology; for the place where they are most abundant of all is just at the inner margin of the insertion of the deltoid, where sebaceous glands scarcely exist; and on the prepuce and face, where they are abundant, the scales are absent. I was not fortunate enough to hit upon the valuable observation—so shrewdly interpretated by Dr. Fagge—of the cast hairs retained in the scales; but independent observations had determined my belief, before I saw his paper, that this disease had nothing to do in its origin with diseased sebaceous secretion, still less with hypertrophy of the epithelium, but merely with the fact that the scales were not shed as they ought to have been. A most curious fact is its always being worse in Winter, and often being entirely absent in Summer. We know that furred animals have their coats thickened at the approach of Winter, not by any hypertrophy, but simply by the delay of the casting of the epithelial structures—hairs—until Spring. Shall we speculate on this epithelial ichthyosis being a case of atavism? Evolution theorists might assert that it is; and the fact that it is, like albinism and cleft palate, almost invariably hereditary, is in favour of this possible view.

To return to the pathology of Ichthyosis. I may say that I can corroborate Dr. Fagge's view that there is a form of the disease which is peculiarly liable to "tetter" and "bleb," but that the variety seen in Sterndale's case never does either, as far as my own experience can affirm it, and the reports of cases to which I have access. Clinical observation is a much better guide for the formation of a nosological nomenclature than fictitious morbid anatomy; and it seems to me that we had better retain the old name of Ichthyosis, and speak of two varieties, the dry and the moist. There are many clinical facts which tend to support this natural division. These are, the liability of the latter and the non-liability of the former to attacks of bullation and inflammation; the frequent congenital occurrence of the moist form and the infrequency of heredity in it, while, on the contrary, the dry form seldom appears till childhood, and is most frequently hereditary, as in Sterndale's case. Then, again, the moist form is general in its site, while the dry may be general, but is specially localised; and, a most important point, with the former we very frequently have, as Dr. Fagge has the credit of first insisting on, a stunted growth and peculiar deformities of the face and limbs, while with the latter this has not been observed.

On these grounds I propose, therefore, that we reject Mr. Wilson's new term of Xeroderma, and retain the old one, Ichthyosis; and that from clinical observation we recognise two varieties, Ichthyosis sicca, the more common, and Ichthyosis uvida, the rarer form of the disease.

NOTE ON BIOGENESIS AND ABIOGENESIS.

By E. M'CLURE, M.A.

THE spontaneous generation question has been invested with an increased interest since the delivery of Professor Huxley's address at the late meeting of the British Association. The advocates of the opposing theories on the subject have started to work with renewed zeal to bring the matter to a

definite issue. Professor Huxley and Dr. Bastian stand forward as the acknowledged leaders on both sides. The labours of the latter gentleman, who contends for the spontaneous generation, or abiogenesis theory, are certainly very zealous. His recent papers in "Nature" have won for him many partisans both here and in America. The New York Medical Gazette of the 5th of November devotes an article to the subject, in which there is exhibited a considerable leaning to the Abiogenesis theory. The experiments of Dr. Bastian upon sealed tins of preserved meat, and flasks containing organic matter, exposed for a lengthened period to a temperature as high as 300° Fahrenheit, seem of great weight to the writer of that article. The objections of Professor Tyndall, however, are impartially noticed, and the Editor calls for further and crucial experiments, in order that this important question may be settled. He thinks, however, that there are a priori considerations to encourage the supporters of the Abiogenesis theory. There must have been, he maintains, a period—prior to the "origin of species," or the era of "natural selection"—when the first organic compound came into existence; and he is inclined to believe that this must have taken place by the "re-arrangement of the molecules" of inorganic matter, by the operation of physical forces under certain fixed conditions of which we are yet quite ignorant; and that this process is very probably going on around us still.

Dr. Cameron, in his "Report on Public Health," in the November number of the Dublin Quarterly Journal of Medical Science, after reviewing Professor Huxley's late address, states that Dr. Burdon Sanderson believes that the recent researches in this subject have established at least one fundamental doctrine—namely, that every kind of contagium consists of particles. The smallest organisms as yet discovered are of a spheroidal corpuscular form, called micrococcus by Hallier, and microzyma by Béchamp. It may be interesting to give the former gentleman's opinions regarding their structure, a review of whose work appeared some time ago in the Medical Times and Gazette:—

"If, for instance, micrococcus gathers on the surface of the fermenting fluid, the newly-formed subdivisions of the parent cells remain in connection, forming links of a chain. In the same way, these chains may form in masses upon the mucous membrane of the mouth and pharynx, and pass, more or less broken up, through the alimentary canal, and may be found in

large masses in the fæces. Remak gave these forms the name of Leptothrix buccalis; but since leptothrix is a kind of alga, I have preferred to call them mycothrix. In the same way, beautiful arborescent growths may be produced under certain atmospheric influences which have been called hormyseium, but which should rather be called the hormyseium form of micrococcus. In like manner, anthrococcus may present several varieties, which have been classified as oïdium, torula, &c.

"Micrococcus, cryptococcus, and arthrococcus are, therefore, not separate species, but merely morphæ, or forms representing stages in the growth of different fungi, which, however similar they may be to each other, never lose their specific characters. A fact of the utmost value in the study of vegetable parasites is, that we are enabled to make each yeast-cell bud and develop, if we place it on an appropriate solid soil and provide it with filtered air.

In the blood and tissues of the human body, rich in nitrogen, of course, the micrococcus of fungi alone is to be found. Anthrococcus is, however, frequently found on the surface of the mucous membrane of the mouth and stomach, whilst cryptococcus is sometimes met with in the contents of the stomach after certain kinds of food have been taken. When the micrococcus of any fungus occurs in large masses in the blood of man, it may generally be looked upon as a pathological indication. I have, however, occasionally found the micrococcus of Penicillum crustaceum in the blood of perfectly healthy people. At all events, the occurrence of micrococcus in blood can only be considered as of any real pathological moment when it is known from what fungus it proceeds.

"The micrococcus cells are generally so small that they require to be magnified 2,000 diameters to be examined, as they do not present distinctive characters. The fungus from which they have been derived can only be determined by cultivating them. I have succeeded in finding the micrococcus of certain fungi in a considerable number of diseases, and have always found one form peculiar to one and the same disease. To develop the fungus, in each case a supply of filtered air and a solid substratum are necessary, as mentioned above. Under these circumstances, the micrococcus gradually enlarges, until the cells reach about the diameter of the respective fungus. These large translucent cells, which have been named "sporoids," are capable of budding"

Dr. Wilks, Physician to Guy's Hospital, in a late number of the *British Medical Journal*, offers some interesting observations on the origin of specific diseases. He says, that—

"In Professor Huxley's address at the British Association, on spontaneous generation, he rightly includes in the large field of nature over which he casts his eye some matters pertaining to pathology. His own opinion clearly leans towards the old and prevalent doctrine *Omne vivum ex vivo*; and he endorses by the weight of his name the experiments of Pasteur and his followers. Knowing what the normal mode of production is, he would leave the burden of proof of the spontaneous production of living

matter with his opponents; and I think we may be well satisfied to witness it in the hands of such an able 'abiogenist' as Dr. Bastian. Similar arguments the Professor would apply to the case of the contagious or specific diseases; and accordingly the onus probandi lies with those who believe that such affections can arise sui generis. I cannot at this moment lay my hands on the writings of any author who distinctly asserts the truth of the doctrine; but, judging from the observations of many in our profession, it might be thought that such does extensively prevail.

"Let us see what are the arguments for the existence of a specific poison in this class of diseases. The term poison is used, because a person affected with a specific contagious disease has that in his system which, if transplanted, will produce in another as certain and definite effects as if the latter had swallowed an animal or a vegetable poison. At well defined periods, results are seen in the body so characteristic, that the nature of the infecting cause is at once recognized. Seeing that the matter or blood from a variolous or a scarlatinal patient is capable of producing exactly the same effects in a healthy person, we must feel sure that a something having specific qualities has been conveyed from the one to the other. Whether this something will be found to consist of living germs, as Dr. Burdon Sanderson's observations tend to show, is now a question of opinion; but there are many who think that the day will shortly come when we shall be capable of seeing the typhine or cholerine enclosed in a bottle. In the case of every weed found in a newly-made garden, we believe that the seed was first implanted there; and so, from all analogy, we consider that in every instance of a specific disease a microzyme must have been introduced from an extraneous source. Dr. Huxley evidently thinks that the analogy holds good; and thus we should be content to rest upon the conviction that, in every case of socalled specific disease, the complaint has been 'caught'; and, if we are not able to prove it, we ought to assume it, and let the onus probandi lie with those who deny it. Since all reasoning would lead us to assume the origin of living matter from germs, we are content to believe in the commonly accepted parentage of all animal and vegetable forms which surround us. That they ever have any other origin, or can arise spontaneously, must be shown to be true by those who have reason not to be satisfied with the current opinion. So it rests with the abiogenist in our profession, or the man who believes in the spontaneous origin of scarlatina or such like disease, to act with as much care as Dr. Bastian has done.

It would be wrong, I think, to speak strongly on either side of this question in its present state. I feel sure, however, that the zeal of the supporters of the opposing theories cannot fail to be attended with a speedy solution of the difficulty. The question is one of primary importance in biological research, and the fact that the minds of some of our greatest investigators in that department have been zealously directed to it, is a hopeful sign that it will not long remain among the quastiones vexata of science.

PRURITUS OF THE SKIN.

BY PATRICK NICOL, M.B.

THE following very interesting case was published in a late number of the Centralblatt für die Medicinische Wissenschaften, by Dr. K. B. Hofmann, Lecturer on Renal Diseases in the Vienna University:—

It is known that certain substances (sugar, the constituents of the bile, the products of the intermediary transformations of nutriment, as modified by Bright's disease), when retained in the blood, often induce severe itching. A Pruritus cutaneus of this sort always leads the physician to search again and again for anomalous products of the vital exchange-processes in the urine; that is, when it does not arise from some other affection of the skin, nor can be referred to some severe lesion of the brain (such as general paralysis of the insane), and the hallucinations of feeling connected with that.—A man with Pruritus was admitted into Professor Hebra's clinical ward. The blanched hue of his skin, his relaxed muscles, and especially his great diuresis, suggested diabetes. On examining his urine (strongly acid to test-paper), I found, however, no albumen and no sugar. Cupric sulphate was indeed reduced, and the urine assumed a brownish-yellow tint, but no golden oxide was precipitated. This circumstance, and the strongly acid reaction, led one to expect a large proportion of uric acid. I treated 200 cubic centimetres of the urine with hydrochloric acid, and allowed it to stand for 48 hours; not a crystal of uric acid appeared, but, on the contrary a, small sediment of fine acicular crystals, which could be recognized as hippuric acid under the microscope. To make sure that there was no deception, an equal quantity of urine was evaporated to one-fourth of its bulk, treated with alcohol, and then mixed with hydrochloric acid. The same crystals were formed. The reduction of the cupric sulphate arose in this case from the presence of hippuric acid. Urea, chlorine, and sulphuric acid were found to be present in the following proportions (taking the average of the analyses on three consecutive days). In the whole amount of urine passed

in 24 hours, viz., 2,500 cubic cent. of the specific gravity 1.025 (Vogel's urometer):—

Urea .. 51·1 grammes (50·7; 53·3; 49·4). Cl. Na. .. 14·7 ,, PO₅ .. 5·4 ..

The urine was of a dark amber-yellow colour, and had an acid reaction, even when it had stood in an open vessel for many days. The case is, therefore, one of slight diabetes insipidus, with the uric acid of the urine replaced by hippuric acid. Neither the treatment (baths) nor the food eaten explain the morbid condition which, according to the statement of the patient, was already of some weeks' duration.

Without one's being justified in concluding, from a single case, that the presence of hippuric acid, or of the anomaly of the transforming processes, which betrayed itself by the altered composition of the urine, should be looked on as the cause of the Pruritus even in the case in hand, it nevertheless seems advisable, in every case of Pruritus cutaneus (when no causal circumstance is otherwise known), to examine the urine not only for albumen and sugar, but also for other substances, such as hippuric acid, xanthui, and kreatinin. Any rather large quantity of these substances always points to a lesion of transformation-processes, in which again may lie the explanation of that, otherwise unexplained, neurosis.

ON MORPHIA IN THE TREATMENT OF CUTANEOUS DISEASES.

By H. S. Purdon, M.D., Physician Belfast General Hospital and Hospital for Skin Diseases.

ANY forms of skin diseases are benefited and various distressing symptoms relieved by the use of morphia. Its advantage over opium is considered to be due to occasioning a less degree of vascular or arterial excitement, seldom causing any headache, vertigo, or constipation. If morphia be taken in an overdose, itching and tingling of the whole cutaneous surface is often experienced, accompanied by more or less cerebral excitement. Dr. A. T. Thompson considered morphia to act as a sedative to the heart and a stimulant

to the nervous system; moreover, augmenting the exhalant functions of the skin, which, in certain diseases, as prurigo, makes this salt doubly valuable.

The preparations used have been the hydrochlorate, bimeconate, and acetate. The last is best suited for hypodermic injection. None of these preparations are safe for young children—indeed, it is better to substitute the bromide of potassium.

The first disease on the list in which morphia is particularly useful is prurigo, by which term I imply a neurotic condition of the skin, generally an affection of advanced life. due to altered innervation of the cutaneous covering. In this disease—the characteristics of which are well known, and need not be here specified—the perspiratory function is usually absent: hence the use of morphia, not only to allay irritation and itching, but also to occasion more or less moisture and exhalation from the skin. It is contra-indicated, however, when the urine is scanty and high-coloured, a condition of things often present in the disease under notice, which is in many instances preceded and accompanied by diminished secretion of urine. In such a case the latter symptoms must first be remedied before we prescribe morphia. Of course, the neurotic element in the case must not be lost sight of, and which in most instances may be combated by a full dose of quinine (ten grains) daily, as suggested by Professor Erasmus Wilson in a former number of this Journal. In females, prurigo is generally accompanied by a highly-sensitive and irritable condition of the nervous system. It is in such cases that morphia acts best, giving them the sleep they are so much in need of, and relieving the patient from a state of absolute misery to one of comparative comfort. Of course, I regret to say that the treatment by morphia is often only palliative, and the best plan to accomplish this end is by the hypodermic injection of morphia, beginning with the eighth of a grain of the acetate, gradually increased. It may be necessary in some cases to inject twice daily. The part selected is not of much importance—the arms do very well. By using the hypodermic method, we are able to keep the stomach for food, cod-liver oil, &c.

In dermatalgia, or that neuralgic condition of the skin often hysterical, as well as in the neuralgia of herpes, the hypodermic injection of morphia is of great benefit, being free from one objection to the use of opium—viz., that morphia does not tend to increase the existing congestion of the vessels present in herpes. For the same reason it may be used to procure sleep in urticaria, but given internally; as the hypodermic method has been known to procure the eruption of wheals, whether from the morphia or the irritation and wound caused by the needle in a sensitive and hyperæsthetic skin I cannot say. Hence, in the latter, it is better to administer the medicine by the mouth.

We are all familiar with the necessity of prescribing sedatives in certain cases of eczema. Liq opii, bromide of potassium, and recently chloral, have been used. Morphia is no new remedy for this disease, but it is free from the objection against the use of opium, which frequently interferes with the already impaired digestive functions, stimulates, causes headache, and allows no sleep; moreover, being partly eliminated by the sweat glands, actually makes the eczema much worse. This is frequently seen when the patients have been prescribing for themselves before applying to a medical man, their usual dose being thirty drops of tinct. opii. once or twice daily. In such cases morphia may be substituted, and that with advantage, not only in eczema, but also in cases where the disease has run into ulceration—a very common complaint, generally seen in the lower limbs, usually a very chronic and tedious complication. We have it on the authority of Mr. Skey, that opium is valuable given internally in chronic ulcerations of the lower extremities, and I believe that morphia is equally so.

In cancer, to soothe and assuage pain, morphia is daily prescribed by the profession. In lupus, after cauterizing the tubercles with a pointed stick of nitrate of silver pushed freely into them—a plan I usually adopt—a dose of morphia gives the patient a good night's rest. Indeed, it is necessary to give some anodyne in these cases.

In gutta rosacea, a disease so frequently connected with derangement of the stomach, the patient being often a confirmed dyspeptic, morphia is of much service, and, by allaying gastric irritability, &c., allows us to prescribe suitable remedies.

A morphia suppository is one of the best palliative remedies for that painful affection, pruritus ani, is cleaner and more easily applied than either lotions or ointments. In small-pox, when accompanied by much irritability, inveterate itching of the skin, loss of sleep, and tendency to convulsions, morphia—either acetate, hydrochlorate, or bime-conate—may be prescribed in a full dose. The last-mentioned I have frequently ordered during the present epidemic in Belfast.

Lastly, it only remains to say that the pain of a blister, especially if large, and to be applied to a "nervous" person, may be prevented by the hypodermic injection of morphia. This plan of treatment was lately recommended in one of the medical journals.

Such are a few of the cutaneous diseases in which morphia and its salts may with advantage be prescribed.

REVIEWS.

Observations on Some of the More Recent Methods of Treating Wounds, &c. By Edward Lund, F.R.C.S., Lecturer on Anatomy, and one of the Surgeons to the Manchester Royal Infirmary. Manchester: J. E. Cornish.

Medical and Surgical Reports for 1870. He has had it reprinted for circulation, and we think that the idea is good. It contains much new and interesting observations on the various methods used at the present day in the treatment of wounds. With regard to healthy suppuration, Mr. Lund thinks that the generality of surgeons speak of this condition as if it were all the better for the patient, forgetting that for every ounce of pus formed, there must be necessarily a loss of strength to the constitution. However, we prefer to let our author speak for himself, merely selecting those passages that appear to us most interesting. Indeed, if all pamphlets were written in the same careful and connected manner, a reviewer's work would be very light.

"It is very probable that the putrefactive changes which occur in the fluids collected, as already described, upon the surface of a recent wound, become themselves a source of irratation, and excite a degree of inflammation over and above what nature would set up for reparative purposes. We know that in these putrefactive changes ammonia, in some form, is al-

ways produced. We know how extremely irritating this volatile alkali is to animal tissues; how even if applied to the sound skin, where the horny covering of the cuticle could protect the subjacent structures, it produces pain and redness almost intolerable; and if its application be long continued a blistering or vesicating effect is the result. If, therefore, in the putrefaction of the albuminous matter on the surface of a wound, ammonia must necessarily be thrown off, this, if it were the only irritating product, would, hour after hour, keep up an amount of vascular excitement in the part, and certainly augment the inflammatory changes, and in this way we should find the inflammation would run on with great rapidity from the fibrinous or adhesive to the suppurative or non-adhesive stage. It may, however, be remarked in opposition to these views, that since we have pus formed and suppuration takes place in closed cavities, as in large abscesses or serous sacs where up to a certain time no air can possibly have entered, and where, therefore, no putrefactive changes can have occurred, the suppuration cannot be due to such a cause. But it must not be forgotten, by way of reply to this, that suppuration is but one of the results of inflammation wherever it may exist, and that in the abscess, or in the empyema, the pus is formed, however large the quantity, without the admission of air, and solely as a product or consequence of the previous inflammation. So that when we say that the formation of pus on the surface of a recent wound is due to the irritation occasioned by the putrefaction of the natural secretions of that wound, it is only the same as declaring that from these putrefactive changes inflammation was set up which ran on to the suppurative stage. If these views be correct, it follows as a necessary consequence that whatever application can be put on a wound, so as to arrest or prevent putrefactive changes in its secretions, will, in the same proportion, regulate the degree and amount of pus that is formed. And it is curious to notice, in confirmation of this conclusion, that those applications to wounds, which are themselves the most decidedly antiseptic, are just those by which the secretion of pus is most easily moderated. Of these, there are three which we may mention as being most commonly in use, viz., alcohol, the salts of zinc, and carbolic acid. These all act in some mysterious way, the exact details of which are as yet unknown to us, by preventing or checking putrefactive changes.

"Now alcohol does not fulfil these conditions: it destroys putridity when in contact with animal matter, as daily experience in the preservation of anatomical and surgical specimens in our museums shows; but it is so volatile, and its vapour when diluted possesses so little power to check putrefaction, that it is of little use except when applied directly to the part. The salts of zinc do nothing towards correcting the condition of the atmosphere surrounding the wound, they act only by direct contact; whereas it is possible so to arrange the preparations in which carbolic acid forms a part, that they shall destroy putridity both by direct contact and by atmospheric diffusion. But those who have used carbolic acid as an antiseptic most preseveringly can best testify to the practical difficulties attendant upon its employment. There are some persons in whom the skin surrounding a wound is so delicate, that the mere contact of carbolic acid directly with the surface sets up an amount of irritation and inflammatory change far beyond the parts

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originally injured; so that in the employment of carbolic acid in the treatment of wounds, when, unfortunately, it was used far more liberally than was at all necessary, it seemed in many cases to do more harm than good. It caused an amount of irritation and vascular turgescence around the wound which induced many surgeons at once to discard its use, forgetting that this result was caused by the excessive amount of the antiseptic which was contained in the preparation, which ought to have been so diluted that it should just suffice to check putrefaction, and yet not be so strong as to act injuriously upon healthy tissues. Carbolic acid, like many other empyreumatic substances, has this great advantage, that being volatile at the mormal temperature of the body, it has a tendency to diffuse itself in the atmosphere at a distance from the wound, but yet this very volatility will cause it in many cases to escape more rapidly than we desire, and in the course of a few hours after its application it will be found to lose its antiseptic powers; in other words, it has evaporated and things are left as they were before its application.

"It is not carbolic acid as a special means which is to be regarded as so serviceable in the treatment of wounds, but the power of the carbolic acid or any other substance which may hereafter be suggested as better than it, to check, and if possible, destroy entirely, the tendency which exists in the secretions of wounds to undergo putrefaction.

Regarding the changes of putrefaction, Mr. Lund apprehends that they are very similar in nature to those of fermentation. He says:—

"I have taken pieces of freshly cut meat from the centre of a large mass, and quickly slipping them through the mercury under the receiver of a mercury bath, they were immediately seen to be floating on the surface of the metal beneath the glass receiver. Left there for four days, no perceptible change could be observed in the meat; no gas had been disengaged, (for every particle of it would have been collected above the column of mercury had any been set free,) and to all appearance no change had occurred in the colouring matter of the blood in the tissues of the flesh, or in the fluid which had escaped from them.

"Much has been said lately about the presence, in fluids undergoing putrefactive changes, of certain animated vitalised germs, endowed with powers of independent motion not easily distinguishable from mere molecular movements with which, in many cases, they may be confounded, and that the presence of these germs is inseparably connected with the phenomena of putrefaction. But, it is well I should here remark, that my observations have led me to the conclusion that the presence of moving vitalised germs, in animal secretions, as a cause of putrefaction, must be looked upon rather as a condition circumstantial than essential to such a change. It has been taught that, in the decomposition of vegetable matter in alcoholic fermentation, there must be present, as a starting-point of the process, that curiously organised body known as the yeast-plant or the torula cerevisiæ, and some have assumed that septic vitalised germs would take the same place as it, in developing the phenomena of putrefaction. In the fermenta-

tion of beer, and possibly of other fermentable liquids, yeast is employed to set in action the changes which we contemplate, and the yeast-plant is itself reproduced as a consequence of their elaboration; so that, commencing with the one small particle of yeast, it is possible for it, in the progress of fermentation, to germinate into immense masses far beyond its original amount.

Nevertheless it may be said that the presence of this yeast-plant is rather circumstantial than essential to the fermentative change, if it can be shown that fermentation does sometimes take place without its presence. Now it is possible to have vegetable juice with saccharine matter slowly undergoing alcoholic fermentation, without the addition of any of the yeast-plant to the fluid. The presence of the yeast-plant is, therefore, not an essential but rather a very common attendant condition on the vinous or alcoholic fermentation; and in like manner it would seem that in the putrefactive changes which occur in animal matter the starting-point is rather the animal ferment in a state of change, which, being brought in contact with other animal substances, determines rather by chemical than by vital action their resolution into other compounds."

In conclusion, our author differs from Professor Lister, in assuming that it is the rapid putrefaction of the secretions of wounds which themselves react upon the secreting surfaces, and urge on the reparative changes of inflammation one degree too far, from the stage of adhesion to that of suppuration, or, still worse than this, to ulceration, gangrene, and death.

We have shown how we appreciate Mr. Lund's essay by our lengthened quotations from his pamphlet.

The Photographic Review of Medicine and Surgery: a Bi-Monthly Illustration of Interesting Cases, accompanied by Notes. Edited by F. F. Maury, M.D., and L. A. Duhring, M.D. Philadelphia: J. B. Lippincott & Co.

E have much pleasure in noticing the above-mentioned Review—a work, novel in its character, and deserving of all encouragement. Excellent photographs accompany the letterpress. We may particularly mention the plates of Horny Tumours of face and Keloid Tumour. In the first case, Dr. Pancoast informs us that when the patient (aged 78) visited him on June 27, the whole skin of the nose and cheeks, and a portion of that upon the forehead and lips, was covered with horny sores,—"the one involving the left cheek, from which the large horn had fallen, being offensive, and heaped up with horny scabs." The surfaces from which the horns fell

became, we need hardly say, open ulcers. In the case of Keloid Tumour, the patient (aged 28) was under the care of Dr. Maury. A small abscess first made its appearance on the anterior part of the neck, which was opened. A well-marked induration followed the healing of the abscess, which gradually extended round the neck. After nine years, it had encircled the neck, and was about two inches in width. At this time the growth was removed. The resulting wound healed kindly, but the cicatrix became hard and protuberant. After this the tumour was again removed, and at present there actually exists thirty-seven tumours of variable size, the larger one resembling the ruffles worn during Queen Elizabeth's reign. The skin is intact, and perfectly capable of detecting variation in temperature. Its sensibility is also unimpaired. The microscopical character of the disease is as follows: - Principally composed of "connective and elastic tissue, the former being disseminated throughout, while the latter appeared here and there in the form of well-developed elastic bands, running both vertically and transversely. Fat was formed in fine globules. Long wavy bundles of connective tissue were seen running in striæ transversely, just beneath the papillary layer."

It is the intention of the editors to select only the most striking cases, whose salient points will admit of the clearest representation; and the co-operation of different gentlemen connected with large hospitals has been secured. We wish the *Photographic Review of Medicine and Surgery* a happy voyage through the troubled sea of medical journalism.

Clinical Record.

BRIEF NOTES OF PRACTICE OBSERVED AT THE BELFAST HOSPITAL FOR SKIN DISEASES.

A LOPECIA AREATA.—J— E—, æt. 30, of a healthy, robust constitution, admitted in the month of September the patient exhibited a patch of alopecia areata, in extent about the size of a five-shilling piece, situated upon the posterior part of his head; duration of disease six weeks. The patch presented

all the typical appearances of alopecia areata, which need not be enumerated. By examination, no parasite could be detected. The history given was as follows:—

After having had his hair cut some weeks since, the patient, as usual, directed the attendant to shampoo his head. When the process was nearly completed, the hair-dresser suddenly directed a stream of very cold water directly upon the spot where the baldness at present exists. He experienced a slight shock, and for several days felt that particular part of his head intensely "cold and numb"; once or twice had a "pricking" sensation in it; and latterly it has not been so sensitive to touch. The hair began to fall out four weeks since. The disease, in this case, was evidently a neuroses due to a paralyzation of nerve-force, causing a sudden arrest of nutrition, and subsequently falling out of the hair. The indications for treatment were clear, viz., locally stimulation, by the application of the liniment of cantharides; and constitutionally tonics, as the dilute nitric acid.

Psoriasis.—Dr. H. S. Purdon, during the past six months, has been trying various remedies, both constitutional and local, in the treatment of psoriasis. Amongst the former, the various preparations of arsenic, cod-liver oil, hypophosphite of soda, balsam of copaiba, carbolic acid, quinine, &c., have in suitable cases been prescribed. In the latter, tar, black soap, carbolic acid, cold-water dressing, oil of cade, balsam of Peru, citrine ointment, &c., were used. The results arrived at may be briefly stated as follows:—Arsenic, especially the liquor soda arseniatis, combined with cod-liver oil and plenty of animal food, as recommended by Dr. Passant—with, if possible, an exclusive animal diet—are the most satisfactory remedies, and those which "cure" quickest. Relapses, no matter what drug is used, are common. Amongst the local remedies, Hebra's tincture of tar and black soap is the best: if it be objected to by the patient, a carbolic acid lotion may be substituted,—presuming that no acute inflammatory symptoms are present. Copaiba is also very useful, especially if it produces urticaria.

Scabies.—As is usual at similar Hospitals, a good many cases of scabies present themselves, thus affording an opportunity of varying the method of treatment; for instance, a certain number of cases are treated with the compound sulphur ointment, and another batch with the liq. calcii pentisulphidi, and so-on, and the results compared. For scabies, when a good deal of second-

ary eczema is present, Hebra's ointment, as recommended by Anderson, is a very good application: it consists of tar, black soap, sulphur, prepared chalk, and lard; or, if the disease is recent, one good thorough application of the solution of the pentisulphide of lime is frequently sufficient. In private practice, iodide of potass ointment, stavesacre ointment, or even petroleum or black soap, often cure the disease; of course, it may be contracted again from the clothes. A parafine ointment has been tried, but it was not very successful. It should be borne in mind, that any preparation containing sulphur is an irritant, consequently a secondary lichen, eczema, or urticaria, is often produced and kept up by the use of sulphur ointments. Every case of scabies admitted at the Belfast Hospital for Skin Diseases is given a printed card of directions, of which the following is a copy:—

1.—Wash all the body, excepting the head, thoroughly with black, or if preferred, petroleum soap and hot water.

2.—Remain in a hot bath for fifteen minutes; if you cannot have a bath (which, however, can always be had at this Hospital), wash yourself with hot water.

3.—Rub some of the cintment firmly into the skin of the whole body (except the head) for ten minutes or more, and let it remain on the body all night. Wash it off the following morning, and dress in clean clothes.

4.—Repeat these processes every evening for three nights.

5.—Besides the above, put all your washing clothes into boiling water, and have all your clothes "ironed" with a hot iron.

Favus.—Two cases of favus have been under treatment. In one, the duration of the disease was six years: the cup-shaped crusts characteristic of the affection were lost; the hair thinned, and patches of permanent alopecia left. The other case was of more recent origin, the cups being well marked, odour of mice plainly perceptible; hair dry, and covered with "nits." The adjacent skin was but little reddened or thickened. Mr. Startin (Senior Surgeon to the London Skin Hospital, Blackfriars), in his lectures—Medical Times, 1857—recommends the following method of treatment: -To have the hair cut short, but not shaved; the crusts are to be softened with hot water, next washed with tepid water and yolk of egg, and dried. He then applies an ointment of bisulphuret of mercury and creosote, whilst internally an infusion of quasia and iodide of potassium is given,—a method of treatment which may be recommended. Dr. Purdon has, during the last five years, tried various plans

of treatment. One case was carefully treated by depilation on two different occasions, and into each patch from which the hairs were extracted a solution of the bichloride of mercury, two grains to the ounce, was rubbed, a little sweet oil being then applied. Suffice it to say that the disease reappeared in all its vigour in about four months. Other cases were treated, first with oil of cade and glycerine, so as to remove and loosen the crusts, then with iodide of sulphur ointment; another with a solution of chromic acid. The last four cases have been treated (after the hair was cut short and crusts removed) by carbolic acid and oil with the best results. As they have been lost sight of, it may be said that a "cure" has been effected. Carbolic acid is as good, if not better, than creosote; both applications, however, have the property of preventing the spores of the achorion from germinating. The addition of either oil or lard is useful, by hindering the growth of the fungus, owing to exclusion of the air: the head or part attacked may be washed with carbolic acid soap; of course, constitutional treatment is not to be neglected, "so as to change the soil upon which the parasite flourishes." A mercurial preparation, such as that recommended by Mr. Startin, may be combined with creosote, on account of its being a parasiticide; however, it is of little use by itself in such an obstinate disease as favus. Should another case of favus present itself, Dr. Purdon intends to try the effects of Professor Cantoni's plan of treatment by fomentations of rectified spirit, the crusts to be removed, first by warm poultices. Moreover we have the high authority of Küchenmeister in support of this plan of treatment, who found that alcoholic solutions acted most powerfully as parasiticides.

Editorial Commentary.

ULCERS A CAUSE OF BRIGHT'S DISEASE.—Professor Fischer, of Breslau, has shown that chronic ulcers of the legs, if allowed to persist unhealed, invariably lead to amyloid degeneration of the kidney. Hence the cure of such ulcers becomes a matter of great importance. Dr. Fischer recommends Langenbeck's continuous bath as the best treatment.

Dermatological Conference.—A dermatological conference, to be held, say, in London, would be an event of much interest. Great Britain and Ireland, Germany, France, Italy, America, &c., ought to be well represented. Many important matters could engage the attention of the conference, as, for instance, a classification of skin diseases, the settlement of the vegetable parasitic question, the necessity for the Licensing Corporations recognizing dermatology, &c., &c. We merely mention the above idea: if thought feasible, we hope that steps may be taken to act on the suggestion.

Styptic Colloid, for promoting the healing of wounds by the first intention, or for treating open and fætid wounds, and for arresting hæmorrhage, is well known to the profession. We have found the colloid a very good application for herpes zoster. Mr. Browne (Liverpool Hospital Reports, vol. iv.) recommends us to paint a patch of eczema, complicated with varicose veins, freely with Richardson's styptic colloid, allowed to evaporate to half its bulk before being used; the film left by the colloid dries and contracts; it is then to be covered with a sheet of thin vulcanized india-rubber, and bandaged. Thus pressure is applied, and the atmosphere excluded.

TOPICAL TREATMENT OF LUPUS SERPIGINOSUS.

Medical College, New York, has published (American Journal of Dermatotogy, vol. i., page 316) an interesting paper on the above subject, in which he extols the acetate of zinc, originally recommended by Neligan, of Dublin. The method he employs is as follows:—The ulcerations are carefully freed from scabs, their surfaces washed and dried; then a crystal of the acetate of zinc is thoroughly applied. A solution of the salt (gr. viii. to \(\frac{7}{3}i.\)) is kept constantly applied on lint, with a piece of oiled silk covering it. If the patient goes about much, an ointment containing the salt (gr. x. to \(\frac{7}{3}i.\)) may be substituted for the lotion. The application of the crystals should be repeated once a week. The pain produced is very intense; it may, however, be relieved by cold water. Several cases are recorded in which this method of treatment was adopted.

TREATMENT OF ERYSIPELAS IN AUSTRALIA.

R. ROBERTSON, M.R.C.S., has published in the November number of the Australian Medical Journal a paper on "Erysipelas; with particular reference to its recent occurrence in the Melbourne Hospital," from which we extract the following:—

"Regarding treatment there has always been great discussion, the antiphlogistic and the stimulating treatment being the two chief divisions. I think the former should be abandoned except under particular circumstances, such as in a case of erysipelas of the head and face, where, through the swelling, there is any impediment to the return of the blood from the head, there is congestion of the membranes of the brain. I would, in such a case, strongly advise the application of leeches, at the same time watching the state of the pulse carefully, and I think this is the only instance in which we are justified in blood-letting. In the edematous form, a puncture may be made early; and in the phlegmonous state, so soon as a limb presents that 'boggy' feel to the finger, one is perfectly justified in using the knife.

"Various applications have been recommended and tried; the oldest is the nitrate of silver applied to the skin, encircling the blush. I have not much faith in it, having seen the blush make its appearance beyond. Iodine, collodion, flour, sulphate of iron, cotton wool, &c., are among the external applications recommended. I find the best application to be the iodized collodion (gr. xx., ad. zj). It has acted remarkably well in every case where I have used it.

"Tincture of iron and brandy are the internal remedies to be relied on; the former in doses of m xx. ad. 3 ss every three hours, and the latter in small doses, given frequently. The sesqui-carbonate of ammonia is also a very useful remedy where there is much nervous disturbance, with a dry brown tongue; but in the phlegmonous form sulphurous acid, in 3ij. doses, acts better than anything else, with a poultice applied to the part, after an incision is made. I like the dressing of oakum lately come into use. It acts as an antiseptic, and stimulates the parts. The dressing is simply oakum. There is one sort better than another, and it may be applied dry, being previously teazed out and laid on to the wound; or being teazed out, it may be wetted with warm water, and then applied with a piece of oil silk over it. It is clean, and has an agreeable smell.

"Sedatives are often necessary in these cases, and I find opium itself, or morphia, the best remedy. They may even be given in delirium, consequent upon congestion of the membranes of the brain. I have tried the chloral hydrate, and my experience is that wherever there is anything like suppurative fever it makes the patient delirious, and acts in any way but a beneficial one. Morphia produces at once the desired effect."

DERMATOLOGICAL CLINIQUES.

As the Summer Session will soon be commenced, we publish the following list of Dermatological Cliniques, in the hope that it will be found useful by our student friends. We are indebted to the *Lancet* of September 10th, 1870, for much of our information. At the *special* hospitals, the student will no doubt see a larger number of cases.

London, St. Bartholomew's Hospital, Dr. Duckworth, Fridays, at 1-30 p.m. Charing Cross Dr. Beigel. St. George's Dr. Barclay. ,, Guy's Dr. Fagge, Tuesdays, at 12 noon. Mr. Hutchinson. London St. Mary's Dr. Cheadle, Thursdays, at 3 p.m. Middlesex Dr. Liveing. University College Dr. Tilbury-Fox, twice-a-week. Mr. Milton, Dr. Oates, and) St. John's Skin Mr. Bowden, Messrs. Startin, Hutchinson, Blackfriars ,, 22 Naylor, and Sims, British Messrs. Squire and Gaskoin. Birmingham General Hospital. Bath Skin Dispensary, Mr. Michael. Leamington Skin Hospital, Mr. Blake. Leeds General Infirmary Dr. Clifford Allbut. Liverpool Skin Dispensary, Messrs. Cauty and Browne. Edinburgh " Mr. Stevenson Smith. Dr. M'Call Anderson, twice weekly. Glasgow Dublin, Adelaide Hospital, Dr. Walter G. Smith, Belfast Skin Hospital, Dr. H. S. Purdon,

The student has the opportunity of gaining "special" knowledge of the nature and treatment of cutaneous diseases by attending one of these cliniques. The scheme of instruction pursued at the Belfast Hospital for Skin Diseases is to give practical instruction in cutaneous medicine and surgery, illustrated by cases, grouping several of the same disease together, and comparing them, making the student diagnosis and prescribe, &c., on every Wednesday and Saturday. Clinical lectures are given as occasion offers. The minute anatomy and pathology of the skin, illustrated by microscopic specimens, is also described and explained. The therapeutics of cutaneous diseases are treated of at the ordinary meetings of the class.

SCROFULODERMA.

We have had, however, during the last six years, a good deal of practical experience regarding strumous maladies of the skin,—scrofula in all its forms being a very common disease in Belfast. Mr. Milton, in a former number of this Journal,* offered some important suggestions on the present subject; following his example, we include under that name all strumous complaints found on the skin, no matter where they are situated, as ulcers superficial and deep, warty patches, enlarged glands, and also the indolent and dull red tubercular formations that tend to suppurate, eventually becoming covered with a thick scab, from beneath which oozes unhealthy pus, causing ulceration that proceeds, accompanied by slight loss of substance, the process ending by the formation of a scar.

Scrofuloderma verrucosum, which Dr. M'Call Anderson has dignified by the name of Lupus verrucosus, † is met with in strumous subjects, commencing by the development of small circumscribed, dusky, red, or violet-coloured patches, often assuming a somewhat tuberculated form,—healing, like lupus, in the centre, and spreading at the margins. These little tubercular spots are in many instances confluent, but more frequently isolated; finally warty growths appear on these elevations, of a dusky hue, due to a thickened condition of the cutaneous papillæ. eruption is of a tedious and chronic nature. We lately had a young girl for eight months under treatment with this disease, situated upon the instep of left leg. The little patient's health had always been fair. The affection on the leg presented irregular rugous patches covered with warty excrescences, separated from each other, with a tendency to ulceration around the margin of the disease.

During the year 1867, 824 cases of skin disease were admitted at the Belfast Hospital for Diseases of the Skin; of this number, scrofulous affection occurred to the extent of 12 per cent., at which average these cases have remained, occasionally increasing however, especially in the Spring. Indeed, from the number of patients admitted in the early part of the year, one may say,

^{*} Journal of Cutaneous Medicine, No. 13, vol. iv.

[†] Ibid, No. 1, vol. i.

with Shakespere (who refers to the "King's evil" being cured by royal touch):—

"Strangely visited people,
All swollen and ulcerous, pitiful to the eye—
The mere despair of surgery—he cures,
Hanging a golden stamp about their necks,
Put on with holy prayer."

With regard to enlarged or strumous glands, we know that lymphatic glands enlarge by cell hyperplasy, and afterwards are prone to undergo cheesy degeneration, ending occasionally in an ulcer; by which we are to understand one determined by the inflammation and ulceration of a lymph gland enlarged by cell hyperplasia, and which has undergone degeneration. These ulcers are liable to occur about the region of the neck, in company with eruptions on mouth and cheeks, usually impetiginous, or with otorrhea, discharge from mucous membrane of mouth and nose, conjunctivitis, &c. They are characterised by great obstinacy, and encroachment upon the connective tissue, and also by their serrated borders. In scrofula, it is the glandular system that is primarily affected, accompanied by engorgement of the capillary vessels and languid circulation, the blood being decidedly degenerated.

Dr. Sterl, of New York, has lately (Medical Gazette) written on the production of scrofula. He finds that, in scrofulosis, perfect oxygenation of the blood does not take place; for physiological experiments have proven that fibrin, so necessary in supplying muscular waste, is formed in the blood from albumen by the action of oxygen. He says:—

"The air of our city (New York), we know, is to a certain extent vitiated, and does not contain the requisite proportion of oxygen; but, in addition to this, our population is undoubtedly afflicted with an abnormal condition of the receptacles of this oxygen in the lungs; the blood cells, which, owing to the use of insufficient, unsuitable, or deleterious food, or from other causes, do not possess the vitality necessary to a healthful performance of their functions.

"The urine of scrofulous persons, and that of children, selected for obvious reasons, contains a superabundance of the salines, with an excess of hydrochloric, phosphoric, and lactic acids; not unfrequently oxalic acid.

"The perspiration has a decidedly acid reaction, and is of more than usually offensive odour.

"The secretions from mucous membranes are augmented, and tend to become excessively albuminous under inflammatory action.

"Lymph, too, exists in superabundance, owing to the inordinate activity of hypertrophied lymphatic vessels and glands, and, like the blood, it contains more than its natural proportion of albumen.

"The scrofulous diathesis I have always found most decidedly marked during and before the period of the first dentition."

Some French physicians divide the great class of scrofulides into benign and malignant; and, as symptoms of the first period of scrofula, recognize primary lesions, classified as exudative, erythematous, and papular. In the first-mentioned class, strophulus, impetigo, and sebaceous acne are contained, all forms of the latter being regarded as strumous. Amongst the erythematous forms of scrofuloderma, M. Bazin places chilblains, especially those accompanied by deep-seated chronic inflammation of the sub-cutaneous tissue, a structure affected in preference by scrofula.

Tenacity, persistence, gradual extension to new tissue, participation of lymphatic glands and sub-cutaneous cellular tissue, ending in suppuration, are characters common to scrofuloderma, which, moreover, differs from other skin complaints in absence of itching, and usually of pain.

Cazenave looked on "malignant scrofulides" as manifestations of hereditary syphilis, being remarkable for their welldefined limits and tendency to relapse. "These eruptions are divided into three classes—ulcero-crustaceous, tuberculous, and erythematous. The crustaceous scrofulide contains two important varieties-inflammatory-ulcerating and ulcerating with fibro-plastic formations. The first commences with tubercles or pustules simply inflammatory, which degenerate into ulcers that destroy surrounding soft parts, but are arrested by the bones. These ulcers cover themselves with thick green crusts, imbedded in the skin, and formed of concentric layers. After the crust has fallen and the ulcer healed, there remains a white, irregular cicatrix, contracting the tissue like those of a burn, and adherent to the bone. In the second variety, the tubercles are fibro-plastic, caused by a proliferation of the cellular tissue, and the ulcers attack the bone as well as soft parts." The primitive element in the class of tubercular scrofulides is a fibro-plastic tubercle remaining stationary without ulceration on the cutaneous surface; however, cicatrices are produced, as if from an open ulcer, new fibrous tissue filling up the excavation caused by destruction of sub-cutaneous cellular tissue. The erythematous scrofulides of Bazin appear to be of an innocent nature. In some cases the sub-cutaneous tissue becomes ædematous, and of a pasty feel. There is no burning, itching, or pain, and eventually a white, irregular cicatrix appears in the centre of the patch, which gradually extends to the circumference. Malignant scrofulides are distinguished from cancer by the edges of the ulcers, which are undermined, instead of prominent; by the bottom, which does not present the hard, fleshy granulations of cancer; and by absence of pain.

A few words on treatment, and we are done. Mr. Milton,* who, as a practical observer and trustworthy writer, is excelled by no one, places great faith in "plenty of purgatives." He believes that the patients get well as quickly, if not quicker, by this plan, than with iron, cod-liver oil, &c. A tablespoonful of old rum in half-a-pint of new milk every morning, is, he thinks, a capital nutritive agent.

Dr. Laycock recommends the phosphates of lime, either pure or as ivory dust, in the various forms of struma, as well as in some syphilitic affections, on account of it supplying phosphorus to the nerve tissue. The local treatment is all-important: if there be much inflammation, poultices are required. Say we have in the person of a young lady an enlarged and suppurating gland on an exposed part, and which has been religiously poulticed for several days, how shall we best avoid a mark? Simply by applying a leech, and through the leech-bite, with a fine knife, such as is used for operations about the eye, make the necessary puncture—not incision. To prevent an enlarged gland from suppurating, we know of no remedy except nauseating doses of tartar emetic, and ice to the gland. It is not every one, however, who will permit of this treatment. When an enlarged gland is in an "indolent" state, it is a good plan to apply a fly-blister over it, which will either hasten suppuration or excite absorption; or Mr. Jordan's plan of blister near the enlarged gland, and application of a bag containing shot to enlargement, can be tried. If it be an open strumous ulcer, the iodide of lead ointment is a very excellent and wellknown remedy; if, however, the discolouring of the skin is objected to, iodide of cadmium may be substituted. When there is much discharge, astringents at commencement may be necessary, as sugar of lead, tannin, &c. The country people often

^{*} See Mr. Milton's paper, Journal of Cutaneous Medicine, No. 13.

use an alcoholic decoction of fresh walnut leaves with which to bathe and apply to the "open sores," and it is said with advantage. Some excellent remarks are contained in a back number of the Medical Circular, on the treatment of the disease under notice, as well as in causing scars by meddlesome surgery in scrofulous glands. The scars do not depend, the writer says, on the strumous glands being opened, but on the time of doing so. opened at all, they should be opened very early. A scrofulous gland, when it begins to suppurate, contains a substance like soft cheese; afterwards a thin ichor. If it has softened down before it begins to adhere to the integument, the method then to prevent scars will be to make a longitudinal incision before the integuments are spoiled, with a knife, and press out all the softened gland. The cavity will then granulate and heal, and nothing remain but a white line. If the gland be left to pursue its course, and, still worse, if poultices be applied—or if much inflamed, and tincture of iodine be used, the gland adheres to the integument, which becomes absorbed and destroyed; and, after healing, the wound becomes puckered, arising from loss of substance: hence the scar. Empirical treatment of disease. and especially of scrofula, is often absurd. Heberden, in his Commentaries, writes as follows:—"It has been an old dispute among physicians whether the empirical or rational method of curing disease was to be preferred. If by the empirical method be meant that which is founded on facts recorded by others or observed by ourselves, it must be allowed that by this means only has the practice of physic been established. Fact and repeated experiments have alone informed us that jalap will purge, and ipecacuanha vomit; that the poppy occasions sleep, and bark will cure an ague. If we examine the whole Materia Medica and the whole practice of physic, we shall not find one efficacious, simple, nor one established method of cure, which was discovered or ascertained by any other means."

The constitutional treatment of scrofulous affections may be dismissed in a few words: plenty of out-door exercise; residence, if possible, at the sea-coast; and, as regards medicinal agents, cod-liver oil, syrup of the iodide of iron, iodide of ammonium, iodide of potash; or, in some cases, Neligan's solution of arsenic, iodine, and iodide of potash. A good purgative, as recommended by Mr. Milton, containing calomel, is also of service, given about every seven days. In some cases, tincture

of iodine, administered in sherry, answers very well,—or used locally, five to eight drops being injected, with a hypodermic syringe, into an enlarged gland.

A few words will be found in our *Miscellaneous Memoranda* on cerealin, and the manner in which linseed and bran are used at the Ulster Institution for Deaf and Dumb, since 1862, with marked success, in diminishing the number of strumous complaints,—to which, by the way, as we have shown in table of diseases* observed at all the English, Scotch, and Irish Asylums, deaf-mutes are very subject. For delicate children of a scrofulous diathesis, "wheat phosphates," which is really cerealin, should be given with milk, especially as pointed out by Dr. Klencke, of Leipzic, that the milk of stall-fed cows contain very little sugar, and that the butter and casein are diminished, whilst the albumen is often as high as 15 per cent. Moreover, stall-fed cattle are liable to become tuberculous, as testified by Dr. Carsewell.

Such are the principal views regarding the pathology and treatment of a very common disease.

Miscellaneous Memoranda.

Scheroderma.—Dr. Day (American Journal of Medical Science) records a case of Scleroderma, and informs us that the first undoubted case of which we have any knowledge was observed by Curzio, in 1755, and another fell to Henke, in 1809. The literature of the disease dates from an article by Thiral, entitled "Du Schlérème chez les adultes," which appeared in 1845. Single cases appeared from time to time, mostly in France, until Gilette, in 1854, collected twelve cases from other writers, and added two new cases, one of which occurred in his own practice. In 1861, Arning reported a case of his own, with a résumé of eighteen others; three years after which, Köbner published an account of twenty-nine cases. Some eight others were subsequently added by as many different observers, mostly German. A very interesting and detailed account of a case, making the total number forty, was published by Rasmussen, of Copenhagen, in 1867, being the only one which had ever been observed, or, at least, described in Denmark. Three cases were reported by Dr. A. B. Arnold, of Baltimore, in the July number of this Journal for 1869. Rasmussen believes that too much stress has been laid upon the sclerosis, which is certainly the most striking feature, both to patient and observer, but which he believes to be only the final stage

^{*} Observations on Medical and Sanitary Treatment of Deaf and Dumb. By H. S. Purdon, M.D. 1868.

of the disease. He divides the disease into two stages, of which the first is one of infiltration (lymphatic edema of Virchow) in the skin and subcutaneous tissue, with the formation of lymphoid cells in the surroundings of the vessels; and the second is the proper sclerosis, from the development of connective tissue from these cells. He admits that the stage of infiltration is very seldom so characteristically defined as in his case, where the arm was swollen to twice its natural size, with increased heat and redness, but claims that this stage is well marked in a not very small number of earlier observa. tions. He believes that the sclerosis must in all cases be preceded by infiltration, and that with this there must be a temporary swelling of the parts. He has discovered the same sheathed condition of the cutaneous blood-vessels in sections of two specimens of Elephantiasis Arabum, the only difference being that the formation of the lymphoid sheaths around the vessels was on a much greater scale in Elephantiasis, and reached quite to the capillaries, which was never observed in scleroma. From these observations he believes himself justified in concluding that the two diseases depend upon one and the same process, and that they are, in essential points, identical. He suggests as a reason why other investigators have not observed this peculiar development from the sheaths of the vessels, the fact that the few cases in which there have been opportunities for microscopical investigation, have been in an advanced stage. This is partly borne out by the differences between the swollen right arm and the hard atrophied right breast, the lymphoid sheaths abounding in sections from the former, while in the latter they were very rare, and often wanting altogether. As to age, it is a disease of middle life. In thirty-nine cases where the age is mentioned, it has occurred twenty-four times between the ages of 18 and 35 years; only four times before that age, and only eleven times after the fortieth year. As to sex, out of the forty-four recorded cases, thirty-one have been women and thirteen men. It has oftener begun upon the upper part of the body, but sometimes attacks other parts indiscriminately, either successively or simultaneously. Its invasion is usually insidious; often announced by pricking; creeping, or burning sensations, or by an occasional feeling of stiffness in the parts, and its course is generally chronic, lasting months and sometimes years. Sometimes, however, it occurs suddenly, as it did in Rilliet's case. A girl æt. 9, complained of a sudden pain in the epigastrium, accompanied with intense palpitation of the heart, and the physician found the epigastric region as hard as a piece of wood. The next day the induration attacked all parts of the body. In this case the tongue was thickened, and there was a slight effusion into the right pleura and pericardium. The disease, even when extensive and chronic, is not necessarily incompatible with a perfect condition of the general health. Where the thorax and abdomen are implicated, respiration is sometimes laboured, and impletion of the stomach is a source of annoyance. The menstrual function is not always interfered with, though it is sometimes suppressed. In one case— Trousseau's—the checking of the flow by getting wet was almost immediately followed by the disease. The urine is not albuminous, excepting temporarily, and very rarely in any case. Diseases of the heart have been sometimes present, but are believed to have been accidental complications.

sensibility of the parts is generally normal, as is also the transpiration. The temperature is often decreased, but this is not invariable. The disease is not inconsistent with other cutaneous affections, such as acne, eczema, urticaria, and even variola. As regards the discoloration of the skin, it usually exists to a greater or less extent, but the whole body is rarely equally affected. It may be yellowish, yellowish-gray, dark-brown, or it may even be decolourized.

Origin of Pus.—In organs where the capillaries are very numerous, these vessels take part in the process, and red-blood corpuscles are sometimes mixed with the exudation, the force of the stream of blood having probably ruptured the wall. Cohnheim concludes from his experiments that the pus-cells are derived from the blood; that some do come from the blood he considers proved. According to his theory, blood-vessels are necessary for inflammation; injection and hyperæmia are the first stage of the inflammatory process. In vascular organs, this injection and hyperæmia occur in the vessels of the organ, in non-vascular organs in the vessels in the neighbourhood, the pus-cells reaching the organ through the lymphatic canals. Cartilage is the only tissue which has no blood-vessels and no lymphatic canals; in this no genuine suppuration has been seen. Stricker claims that the white corpuscles of blood are not the only source of pus-cells. He says the pus-cell itself proliferates, and that this is the source of the greater mass of pus-corpuscles; epipthelium and connective tissue corpuscles and muscle cells he claims also multiply themselves, and hence he considers that pus is derived from all these various sources. In inflammation, according to Stricker, we have local disturbance of circulation, increased exudation of the fluid and formed constituents of blood, disturbance of nutrition, and consequent growth of cellular elements. The irritation of an injury Stricker considers as transmitted not from cell to cell, as Virchow supposed, but as acting on the vessels, disturbing circulation and so the nutrition.—Boston Medical Journal.

VERATRUM VIRIDE.—Dr. M'Elroy (Bufflalo Med. and Surg. Journal, 1870) says:-One of the most noticeable announcements of a new use of an old remedy during the past month, is that of Veratrum Viride in large doses, for over-doses, or so-called poisoning from over-doses, of opium. of Veratrum is, however, only backed up by one clinical case. Yet it is an empirical fact, that opium is the so-called antidote to the so-called poisoning of Veratrum Viride; and, cæteris paribus, they must be mutually antidotal. They both operate by diminishing the velocity of chemical changes in the tissues. Opium generally without elimination, and Veratrum Viride in large doses with very active elimination. The number of deaths, recorded and unrecorded, from opium are legion; while no solitary record of a case of death from Veratrum Viride has been found after very careful search of textbooks and medical journals. And these facts cover explanations of the modus operandi of many so-called poisonous agents. Deaths are in several instances recorded from Aconite and Gelseminum, -agents which retard motion, or chemical changes in the tissues, without elimination. from chloroform, and all the so-called anæsthetics, are far too numerous, and will most likely and unavoidably occur from chloral, for like reasons,

that it is not followed by elimination. The very frequency of sick stomach following the administration of opium, and more particularly in cases with so-called idiosyncracies forbidding its use, is the exact reason why deaths from opium are not more frequent in general practice. Looked upon ordinarily as a calamity, it is rather the surety that fatal results shall not follow its use under these circumstances. The recognition that there are in practical therapeutics, probabilities and improbabilities, possibilities and impossibilities, will do something towards evoking order out of existing confusion; for these have an undoubted existence in any scheme of scientific medication. No impossibilities have ever been recognized by the profession of any age, though impossibilities are numerous and prominent. The possibility that every form of so-called disease will ultimately be controlled and cured by therapeia is, perhaps, very nearly universally recognized by the profession at the present moment; though disappointment have closely followed practice and experiment for twenty-five centuries.

Subnitrate of Bismuth in the Diarrhea of Young Children.—Heller (Deutsches Archiv für Klinische Medicin, vol vi.) recommends, in the treatment of the diarrhea of early life, the subnitrate of bismuth to the extent of from thirty to sixty grains. In the commencement, Dr. H. gives a dose of the remedy every hour until the diarrhea was arrested, which usually occurred at the end of twenty-four hours. He has never seen any bad result from the use of the remedy. During the continuance of the diarrhea the patient is to be debarred the use of milk.

THE LIQUOR WE DRINK .- Mr. E. S. Cayley, Mydall, York, writing to Bell's Messenger, gives the following information on this subject:—A practical public brewer, who has repented of the evil of his ways, and lives cleanly, and now makes his beer out of malt and hops, has lent me his book of receipts, collected in the days of his youth with much care and expense. Here is a list of the drugs he learned to use in making porter: the quantities I don't give, because it is no use tempting any one to use the prescription:— Extract of gentian, essence of spruce, aloes, cayenne pepper, aniseed, and quassia. These are to be added to the wort in copper—a drink that would destroy the appetite of a pike. Sulphate of iron and sulphate of zinc are to be put into the porter in cask for heading. This must have the effect of a vomit. Another receipt for "heading" is bicarbonate of potash and chlorideof iron. Another compound for porter is Columba root, Spanish juice, gentian, logwood, ginger, liquorice, capsicum, carraway, coriander, cloves, and orange-peel—what a mouthful! For bitter ale: camomile and orange-peel. Galamus aromaticus is another article in ale. Ground linseed and chicory give an artificial softness to porter, also ground chalk. Ground mustardseed and nitrate of potash give a sharpness to ale. Pounded oyster shells and other condiments restore hard ale. American ashes-Whatever they are—and ammonia prevent ale turning sour. Velonia bark, an article used by tanners, probably containing tannic acid, gives a flavour to porter; so does logwood. Roche alum (here are dye and mordant together) fines and enlivens ale. Sal plunella and cortex connellæ are said to keep beer sound. Salts of tartar with roche alum make porter fine and brisk. This is some of the physic that is unconsciously swallowed by the thirsty. But this is only

the brewer's half of the story. Could the publican be induced to repent and confess, and tell the story of how two butts of beer grew into three butts, we should learn afresh the truth of the old saw, that much runs out of the spigot that never ran in at the bunghole. There is but one cure—cheap malt; and malt is dear, only because the sugar of malt is taxed about four times as much as the sugar of the sugar-cane. And apparently for no other reason than this—that the British farmer grows the one and does not grow the other.

CORNS.—Sir B. C. Brodie writes :- A hard corn, when it begins to be formed, is productive of no other inconvenience than of a slight degree of pain and tenderness after much exercise. The pain and tenderness increase, so that the patient in the evening is glad to take of the leathern shoe, and put on a large slipper. Then the whole foot, after exercise, is hot and uneasy. These symptoms subside with rest, and the absence of pressure, during the night, but return with the wearing of the shoe and exercise during the day. By-and-bye the bursa under the horny cuticle becomes inflamed, and distended with fluid, and the pain is much aggravated. But the sufferings are greatest in those cases in which the bursa suppurates. An abscess forms in parts which are incapable of distention, and you know how much mischief even a very small collection of pus, under such circumstances, may occasion. I was sent for to an old gentleman who was suffering excruciating pain in the whole foot, which was red, and much swollen, the swelling extending up the leg considerably above the ankle. In one toe, and in the neighbouring part of the foot, the tenderness and other marks of inflammation were greatest, and here I discovered an old neglected corn. He could scarcely bear the corn to be touched; however, I removed the hard cuticle with a scalpel, and made an opening into the bursa under it. Not more than a drop of matter escaped, but this was sufficient to give immediate relief. On the following day he was well. I was desired to see another patient, a young lady, under the same circumstances, except that the symptoms were more severe. The inflammation involved nearly the whole leg, and there was a frequent pulse, and much general excitement. I removed the thickened cuticle of a corn on one of the toes, and allowed a very small quantity of pus to escape which was collected beneath it. This gave immediate relief, and on the following day she was all but well. Several similar cases have fallen under my observation. I have already mentioned that the most common seat of a soft corn is in the angle between the little toe and the fourth toe, over the head of the metatarsal bone which supports the latter. Occasionally, however, a soft corn occurs elsewhere—as, for example, on the inside of the little toe, opposite to the last joint of the fourth toe. Such corns are even more painful than hard corns, except when suppuration takes place in the bursa, and then the suffering is less in proportion, as the thickened cuticle of a soft corn admits of distention more easily than that of a hard corn. Under ordinary circumstances, it is easy to give temporary relief to a patient who suffers inconvenience from a hard corn. The thickened cuticle should be removed, so as to lessen the pressure on the parts below; and this may be accomplished in various ways. First-If the corn be of long standing, and a piece of linen or thin leather, spread with some mild plaster (diachylon for

example), be applied, and worn over it, it will sometimes exfoliate or separate without further trouble. Secondly—The corn may be rubbed with the nitrate of silver, or (which is indeed preferable) the concentrated nitric acid may be applied by means of a probe armed with lint. The texture of the cuticle being thus destroyed, exfoliation will take place, so that in the course of a few days the corn may be readily peeled off. Thirdly—The corn may be reduced in thickness by scraping its surface with a very fine steel or fish-skin rasp. And, fourthly—The corn may be removed by means of a fine-cutting instrument. This last is the shortest and simplest method; and the patient may keep himself in a state of comfort by procuring the assistance of a dexterous chiropodist at stated periods, who will perform this operation for him better than he can perform it for himself. With a view to a permanent cure, however, it is necessary to have recourse to other methods of treatment. In some way or other all undue pressure must be removed from the part on which the corn is situated. First, the shoe must be made as nearly as possible to the shape of the foot, and it must cover the metatarus and a portion of the tarsus, so that the whole pressure may not be thrown on the toes; or a boot made to be laced or buttoned may be worn instead of a shoe. In some cases it is advisable that the shoe or boot should be made, not of ordinary leather, but of very soft and flexible buckskin, or of cloth. A material for shoes and boots is sold under the grandiloquent name of pannus corium, which answers the purpose intended in these cases very well. It is really a kind of cloth, but it has the appearance of leather, and is very soft and pliable. Secondly, if any of the toes are displaced in any of the ways which I have before described, we must endeavour to restore them to their natural position. In young persons this may be generally accomplished. A contrivance made use of by the bandage-makers is very useful on these occasions. It consists of a thin plate of metal covered with thin leather, or a piece of strong leather, fitted to the lower surface of the foot,-not to the whole of the surface, but extending from the extremities of the toes nearly to the tarsus.—Medical Gazette.

LIQUOR POTASSÆ IN TINEA TONSURANS.—Dr. H. S. Purdon, writing in the Medical Mirror, Sept. 1, 1870, says:—During the summer of 1869 I was requested by a medical friend to call and see three children residing in a healthy surburb of Belfast. They each suffered from tinea tonsurans for upwards of eight months. In one, a boy, aged twelve, the disease was very extensive, but I need hardly describe the appearance presented by the complaint, as it is so generally known and recognised. In all the cases nearly every parasiticide contained in the Pharmacœpia had been tried, but without avail. I prescribed a lotion containing carbolic acid, which remedy I had found useful in similar cases; also frequent washings of the head with juniper tar and soap; plenty of fat food, and tinct. of quinine. This treatment was continued, I was afterwards informed, for only one week-too short a space for it to have a fair trial. About four months after my visit I happened to meet the mother of my little patients, and inquired how the medicine had agreed, when I was politely told, that, hearing of an infallible "cure for ringworm," sold by a druggist residing in a neighbouring town, she purchased for 2s. 6d. a small bottle of the fluid, containing about half an ounce;

and forthwith proceeded to try its virtues, especially as all faith was lost in orthodox medicine. The plan adopted was to paint a little of the fluid over the affected part daily, soaking up any excess by blotting-paper, cold water being subsequently applied if the smarting was severe. In three or four weeks the children's heads were quite healthy. My curiosity being excited, I requested the lady to give me a little of the fluid, and as she had bought a new supply in case of any return of the disease, I was in due course sent the desired article. From its appearance, feel, &c., I suspected it to be a preparation of potash, which was confirmed by the usual test. Since the above cases occurred I have tried the liquor potassæ in several cases, and always with good results. It is a most efficient parasiticide, penetrating deeply into the diseased dermal tissues. Moreover, the potash causes the swollen cells to disgorge, giving rise to a copious exudation. If we accept Professor Erasmus Wilson's views of these skin complaints being due to phytiform or granular degeneration, the potash probably stimulates the affected part to take on a healthy action, we also know that solutions of potash of varying strength are used by Hebra and others in the treatment of infiltrated cases of eczema, and frequently in tinea tonsurans a thickened state of the affected part is exhibited, on which stumps of hairs are to be seen. In tinea circinata liquor potassæ is also useful. Of course I do not for one moment wish this application to be looked on in the light of a specific, my object being merely to place on record and draw attention to a cheap and easily procured remedy, that in many cases will be found of the greatest benefit.

HYDROPHOBIA.—In the Medical Times and Gazette, April 11th, 1868, the following passage occurs: -- "Professor St. Cyr has recently read an interesting paper before the Lyons Medical Society, having for its object the investigation of whether temperature and humidity exercise any influence on the devolopment of canine rabies. To this end he has made an exact examination of the register of dogs dying from rabies at the Veterinary School during ten years, 1858-67, and has compared this register with the temperature and amount of rain which fell during this period. The total number of cases of rabies admitted was 460, and these were distributed over the different months in the following manner: - January, 37, February, 51; March, 48; April, 48; May, 46; June, 36; July, 39; August, 45; September, 26; October, 25; November, 28; December, 31. A second table furnishes the mean temperature of each month of each year of the decennial period, the mean temperature for the whole period, and the mean annual temperature. Another table indicates the quantity of rain that fell in each month. It results from the first table that the months of February, March, April, May, and August exhibit the greatest number of cases. Some of these months are remarkable for changeable and wet weather; but this does not hold good of others of them, and the advocates of the efficiency of great heats point not only to the returns of August, but also to the fact that, in the year 1865, which was the hottest, 87 cases occurred, being nearly double of the annual mean of ten years. But the year 1866 only produced 31 cases, although the mean annual temperatures of the two years were alike. And even among the 87 cases which occurred in 1865, 55, or nearly 8-12ths of them, did so in January, February, April and May. To elucidate the matter still further,

M. St. Cyr gives other tables, exhibiting the maxima and minima of cases observed, and the corresponding temperatures and amount of rain. The general result is, that neither season, nor temperature, nor the condition of more or less moisture exerts any appreciable influence whatever; also, the race, age, and sex of the animal likewise exercise no influence; and that the cause of the disease, with one exception, are absolutely unknown." Dr. Chisholm, in his work on "Diseases of Tropical Countries," under the head Hydrophobia, states, "We have indeed, no instance clearly ascertained, I believe, of the alternation of heat and cold producing hydrophobia;" and again, Mr. Brown, in his "Manual of Modern Farriery," observes that "no satisfactory cause for hydrophobia has yet been given, although it has been supposed to be occasioned by extreme heat and want of water. Were these the agents of this malady, it would be more prevalent in tropical countries than in Europe, which is by no means the case."

THE GREAT SYMPATHETIC IN GENERAL PARALYSIS OF THE INSANE.—By Drs. Bonnet and Poincare.—(Comptes rendus de la Société de Médécine de Nancy, 1869.)—Most frequently, if not always, general paralysis of the insane, according to writers upon the subject, proceeds from the great sympathetic. The ganglionic cells of this nervous chain degenerate, become filled with a mass of pigment, and end in losing all their power; this pigmentation is in general more marked at the neck than in any other part, and is slightly increased in the shape of small spots of rust of a deep brown and tawny-yellow colour, some of them seated outside of the cells in the ambient cellular tissue. This alteration of the great sympathetic is most frequently so advanced in comparison with other lesions, and particularly with lesions of the encephalus, that there can be no hesitation in regarding it as primitive. Consecutively to the decay of the chain of the grand sympathetic supervenes paralysis of the vessels of the various organs. These vessels dilate and become engorged, causing disturbance of the local circulation, which, in its turn, engenders troubles of nutrition in the tissues. As the cervical region of the grand sympathetic is most seriously affected by the morbid process, and as upon this region the vaso-motor innervation of the whole head depends, the brain is the first to feel the consequences of these unhealthy nutritive conditions. Therefore intellectual symptoms precede and dominate all others. But by degrees the circulation becomes irregular in the other parts of the body, a fact which explains the fatty degenerations observed at a more advanced stage in the kidneys, liver, pancreas, and the muscles. This theory is justified by the experience of those who, in making vivisections, observe a general paralysis, and recognize at once in this matter the well-known results of M. Bernard's experiment. It is incontestably the pathological repetition of the experimental section of the nerve below the superior cervical ganglion. The same permanent congestion of the cephalic extremity; the same elevation of temperature; the ear is red in both cases; the long duration of the congestive state even causes ruptures of vessels in the patient. The thrombus of the auricle of the ear has indeed been indicated by clinical teachers as a characteristic symptom of general paralysis. In both cases the eyes are injected, brilliant, and protuberant; the gums sore and bleeding, without scorbutus. In both cases there is deformation of the oris, and variations of the pupullary opening.

ELEPHANTIASIS ARABUM.—Dr. Cockle writes as follows in a late number of the British Medical Journal:—" In the cases of angeioleucitis ordinarily observed, and resulting either from injury or from the irritation of some specific poison, although the red, ribbon-like band or cord extending to the nearest glands is seen, causing at times severe constitutional disturbance, resembling that described as peculiar to elephantiasis, still either extensive effusion of simple lymph or permanent enlargement of the affected part is of extreme rarity—indeed, almost an unknown result of such inflammation, and quite inadequate, per se, to the production of the disease. Subsequently, Bouilland and Cruveilhier, observing the immense ædema of the extremities consequent upon obstruction of the femoral veins, and finding such effusion occasionally becoming solid and undergoing conversion into fibrous tissue, regarded the permanent deformity as a consequence of the obstructed venous current. The former pathologist, in the course of his valuable inquiries into the causes of ædema, met with the case of a young woman whose legs and thighs actually resembled those of an elephant in point of size, owing to complete obstruction of the cava and the femoral veins. Dr. Meigs has also known the enlargement of the extremity caused by phlegmasia dolens to persist for years—indeed, a limb thus permanently enlarged would constitute an elephantiasis, and form a class of cases at times demanding treatment. Frequently-recurring erysipelas, and even eczema, may occasionally be exciting causes of the disease, from the implication of the connective tissue and adhesive phlebitis of the smaller veins. Syphilis and the paludial poison are at times more especially influential. The author has observed a case of chronic albuminuria in which the skin of one of the enormously distended legs gave way, and constant drain ensued for nearly twelve months preceding a fatal termination. Here the skin of the leg and thigh was exceedingly hard, brawny, and tuberous, with greatly diminished sensibility, giving the affected parts a somewhat elephantoid aspect. Of these alleged causes, however, none act with such uniform certainty in the production of the disease as to entitle them to a higher rank than that of 'occasional' or 'exciting.' As Rhazes most accurately pointed out, there are two forms of Arabian elephantiasis—the white and smooth, and the brown and coarse, the former caused by 'phlegm' or lymph, the latter by dark blood and knotted veins (to be distinguished, however, from simple varix). In the first form, the disease would seem principally to affect the deeper structures and dermic layers, giving rise at times to fatty degeneration of the muscular structures or even osseous tissue, or to a collection of viscid fluid, leaving the surface comparatively unaffected; while in the second form the cuticular aspect of the dermis is additionally affected. stretching the skin and rendering it knotty, fissured, and otherwise diseased. Here the cuticular sensibility is very much diminished, while in the smooth variety it mostly remains intact. It must be borne in mind that the diminished sensibility is restricted to the part involved, and is apparently simply the result of the thickened cuticular surface-differing much from that more general anæsthesia which is so characteristic of one of the forms of Greek leprosy, lepra mutilans vel anæsthetica. In this variety the nervous cords are involved, as shown by recent investigations of Studner.

It must be admitted that genuine Arabian elephantiasis, at its outset, probably involves both the circulating and lymphatic systems, since more or less of local cedema usually heralds in the attack. This position, however, is disputed by Professor Allan Webb, who studied the disease on a large scale in an hospital devoted to such cases in Bengal. He denies the participation of either veins or lymphatics, and describes the disease as commencing without these vessels, by the development of nuclei in a blastema and their conversion into a fibrous and elastic tissue enclosing an albuminous fluid. This view derives support to some extent from Virchow's well-known researches in cell-pathology. There yet remains, then, to be discovered the unknown factor which immediately determines the perversion of nutrition, on which the disease depends. It must be some special constitutional condition, since, notwithstanding what has been designated as elephantiasis is at times apparently a simple local condition, there is abundant evidence to show that, in the great majority of cases, some general dyscrasia must co-exist."

Lupus.—There seems to be a tendency to the formation of large quantities of germinal matter in lupus. The formed material is scanty. capillaries going to a lupus papule are twisted round the clubby kind of cells. This disease chiefly attacks the connective tissue of the true skin. elementary cells of the part undergo abnormal alteration of a permanent nature, leading to a new formation. Dr. Buchanan considered lupus as a new or morbid formation, produced in two ways-1st, by excitement of the nutritive energy of the cells, so that they are stimulated to accumulate in their interior substances such as pigment, which were not there before; and then, 2nd, by excitement of the reproductive energy of cells, so that they are stimulated to divide and multiply, till new parts are formed which were not there before. These new parts are either made up of cells similar to those from the irritation of which they originally sprung, or the cells composing them have become more or less modified in the process of repeated division. If the parts be still similar in elementary structure to the surrounding tissue, or at all events not much modified in the process of repeated division, so as to be easily traced back to their origin in their tissues, then we call them homologous or benignant formations. If quite dissimilar to these tissues, we call them heterologous or malignant new formations. Finally, the heterologous new formations may be divided into pseudoplasms and neoplasms—the former, as lupus, being incapable of independent growth, but extending by the implication of surrounding tissues the latter, as cancer, containing fertile elements within themselves.

Hope and confidence are no mean remedial agents, and in many chronic diseases at least the individual who has faith will recover more speedily, cæteris paribus, than he who is shy of belief. Simply to prescribe drugs, without regulating the diet and general management of the patient, is to omit a most important duty. In acute diseases, directions are to be given as to ventilation and warmth of sick chamber, the amount of light, &c.; the degree of quiet to be maintained, the cleanliness of the sufferer, the nature, quantity, and times for administration of food."

Alopecia—The natural consequence of age, is a change taking place gradually in the follicles, by which the formative structure, from deficiency of nutrition, becomes atrophied, and the follicles themselves obliterated. The change is usually preceded by dryness and loss of colour of the hair. But baldness of this kind is not necessarily confined to old persons: it is daily observed at an earlier period of life, as at forty, thirty, and sometimes in persons still younger. Occasionally it results from mental anxiety, severe affliction, &c., but at other times comes on without apparent exciting cause. In association with the baldness of age, it is interesting to observe that alopecia occurs on the vertex of the head, in that situation in which the integument is bound down somewhat tightly upon the bones of the cranium, and where the circulation is least abundant and most likely to be interfered with. We frequently see it limited on each side by a line which corresponds accurately with the parietal ridges, and posteriorly by the situation of the upper margin of the posterior portion of the occipito-frontalis muscle, while below this line, over the temporal muscle at each side, and over the occipitofrontalis muscle behind, the hair still remains comparatively unaffected. It is obvious that in this case the cause of the fall of the hair must be sought for in the impediment to circulation through the texture of the scalp of the upper part of the head; and, in correspondence with this interference, we remark the paleness of the cranial region. But the same cause may be supposed to have existence also in women, unless we admit that a larger quantity of adipose-tissue situated beneath the integument of the scalp may afford an easy and unimpeded transit for the minute vessels to the capillary plexus of the derma.—On Disease of the Skin, by Erasmus Wilson, F.R.S.

Notes on Disease in Vegetables and Animals, due to the Presence of Fungi.—The following notes are intended to be of a purely practical character. It may, however, be as well to preface them with one or two brief remarks on the structure, &c., of this most diversified vegetable tribe, which includes plants widely differing in appearance, yet agreeing in the essential nature of their construction. The Mycelium, or root fibres of fungi, consists of threads of very various shapes and sizes, and is the flocculent, webby substance popularly called "mould." The mycelium threads often intermix, exhibiting under the microscope groups of spores, which, when fully matured, are liable to be carried away by the air. In some cases the spores run together, having a close union, branching, however, in various directions, when the name Sporidia is applied. The structure of the spore is of a very elementary character, having merely an outer coat of cellulose and an inner one or utricle, enclosing a granular liquid. Dr. Tilbury Fox thinks that the presence of identical parasitic forms in the hard structures of animals and vegetables where no cell structures exist is at least a proof of their independent origin, as in corals, bivalves, &c. Yeast is a compound of microscopic plants, and fermentation is accompanied by the growth and development of Torulouæ. Professor Hallier, of Jena, discovered the process and origin of all yeast fungi. He found that if the spores of a "mould" fungus or blight fungus were put into a fluid capable of fermentation, as a mixture of grape sugar and salt of ammonia, the first alteration observed was the division of the spore-plasma into numerous small nuclei, which

finally leave their parents either by rupture or dissolution of the spore-walls. There nuclei multiply: this is the basis of all yeast formation. Mr. Dancer, of Manchester, considers that the varieties and sources of fungoid growths from which the spores arise are numerous. A fungus is known to develop only on the corpses of spiders; another grows only on the hoofs of horses in a state of decomposition. Professor Huxley, in his late address to the British Association, remarks as follows:--" It is at present a well-established fact that certain diseases, both of plants and animals, which have all the characters of contagious and infectious epidemics, are caused by minute organisms. The smut of wheat is a well-known instance of such a disease; and it cannot be doubted that the grape disease and the potato disease fall under the same category. Among animals, insects are wonderfully liable to the ravages of disease caused by microscopic fungi. In autumn it is not uncommon to see flies motionless on a window pane, with a sort of magic circle in white drawn round them. On microscopic examination the magic circle is found to consist of innumerable spores, which have been thrown off in all directions by a minute fungus called Empusa musca, the spore forming filaments, which stand out like a pile of velvet from the body of the fly. These spore-forming filaments are connected with others which fill the interior of the fly's body, and eats away its viscera. The disease is contagious; because a healthy fly coming in contact with a diseased one from which the spore-bearing filaments protrude is sure to carry off a spore or two. . . . The silk worm is known to be subject to a fatal contagious disease called the muscardine, due to the development of a fungus, Botrytis Bassiana, in the body of the caterpillar." To the above remarks of Professor Huxley we may add that Hooker discovered a fungus which attains considerable dimensions, and is to be found on the neck of a certain kind of caterpillar in tropical countries. It vegetates on the animal, fructifies on it, and the unfortunate caterpillar buries it with itself in the ground, whence it springs up like a funeral plume. Another singular vegetable is known as the Racodium cellare, which has never been found except on the casks in wine cellars. Many of the seeds of these vegetable growths require a peculiar soil on which to grow; otherwise the diseases caused by them (amongst human beings, the forms of ringworm, for example) would be much more common than is the case. The delicate constitutions of children or sickly people are prone to them, the characteristic lesions being well known. A necessary condition for the growth of fungi is the presence of heat and moisture, or dampness. They also require a certain amount of oxygen. With regard to those fungoid diseases attacking man and animals, a copious supply of nitrogen with some hydro-carbonaceous nutriment is required, and it is well known that in certain diseased states of the body nitrogenous matter is actually exhaled from the skin. The mode of entry of these fungoid growths into the system appears to be by either natural openings or accidental abrasions, the germs being carried and freely disseminated by the air. For instance, in man take the common ringworm, frequently seen on children, exhibiting a circular patch of affected skin. Here we have a centrifugal growth of fungus, causing the rounded appearance of eruption, which in the first instance is due to the spores of a fungus, in this case called the Trichophyton tonsurans, alighting-say near a hair follicle; the

mycelium thread or root fibre forces itself deeper still through the superficial tissues. If the disease remains unchecked the fungus becomes more matured, and we may have new appearances presented by the eruption, which at present it is needless to mention. Common ringworm (a bad name, but the one in popular use) has been in many well-authenticated instances communicated from animals to man. Dr. T. Fox states, upon good authority, that this disease is of very frequent occurrence in Australia, the milkers of cows especially being affected, and Professor Gerlach has noticed it in dogs. horses, and oxen, and in man; but the sheep and pig seem to offer exception. Dr. Frazer, of Dublin, some years ago published a valuable paper on a "Herpetic Epizootic Affection, and on its frequent transmission to the Human Subject." The paper contains several cases, occurring especially in County Monaghan. Dr. Fehr has noticed in Switzerland its transmission from cattle to man. Dr. Bazin, of St. Louis Hospital, Paris, has reported a most interesting case of the communication of herpes circinatus (common ringworm), quoted in Dr. Anderson's work. A dragoon came to the dispensary affected with herpes circinatus of the front of the right forearm. skin of one patch was denuded of hair. He stated that five or six of his comrades had contracted this affection as well as himself from grooming diseased horses. We went, he says, to the barracks, where, sure enough, we saw three horses which exhibited round patches absolutely identical with those of herpes tonsurans, on the withers, shoulders, back, and belly. The hair in the centre of each patch was broken off close to the skin, and there was a whitish squamous production which was traversed by hair. The presence of spores was detected by the microscope. The most recent information on this subject is contained in vol. i. of Dr. Dobell's "Reports from Different Parts of the World on Medicine," and is especially interesting as relates to the observations of M. St. Cyr, of Lyons, on the occurrence of favus in cats and dogs, and its transmission to the human race. We know from the researches of Tulasne, that one fungus, no matter of what kind, may pass through different stages of development, and in each stage give rise to a different form of growth, looked on as a distinct species. The mycodermatous fungi connected with the skin diseases that have been mentioned are all forms of common mould, as also those that grow on mucus membranes of birds, as in the throat, for instance. The parasitic affections of plants is a subject of very extensive range; however, we shall only mention briefly that the potato disease, according to the Rev. Mr. Berkeley and others, is parasitic. The vine disease is another example. Many of the diseases of corn, &c., are due to fungi, the Uredo segetum or smut; corn-straw mildew. as Puccinia graminis. With regard to smut, the sooty powder is chiefly spores. Rye is, when ergoted (so useful a medicine), the production of a parasite, Cordyceps purpurea; the nutritious part of the grain is destroyed, and acquires different properties. Rice is sometimes attacked by a fungus, at one time supposed to be the cause of cholera; fruit, wood, &c., likewise have their attacks of fungi, and which affections are propagated by the atmosphere. Dry rot is owing to the presence of Merulius lacrymans. Parasiticides are remedies which destroy their growth; for instance, creosote prevents dry rot in wood, by preventing the spores from germinating; timber for railway "sleepers" being creosoted. With regard to animals,

besides using these remedies, we must also endeavour to change the soil upon which the parasite grows by suitable remedies. In connection with the previous remarks, it may be interesting to give a few extracts from a review of a communication by Dr. Salisbury, of Cleveland, Ohio (Edinburgh Medical Journal), who has investigated the cause of blight in plants, of putrefaction, fermentation, &c.; however, our present notice refers more especially to the origin of intermittent fever or ague. Dr. Salisbury found on a rich prairie ground, recently dried and broken by the footprints of cattle, the cells of a species of Palmellæ, which, on inspiring, occasioned a dry, uncomfortable sensation in the throat. Attracted to these recently dried spots trampled by cattle, the doctor discovered on the recently exposed surfaces of the cracks a sort of grayish mould, and on suspending his glasses over them, he, the next morning, found the under surfaces covered with numerous palmelloid cells. Samples of the turf and fresh mould from these spots, when examined by the microscope, showed that the incrustations with which they were covered consisted of aggregations of the cellules -in fact, algoid cells of the palmelloid type, producing several varieties of mucedinous fungi. Various experiments proved that the cryptogamic spores chiefly rose into the air during the night and fell after sunrise. When the soil is not calcareous and the water is soft, the palmellæ are white or pale yellow, or even green. Dr. Salisbury believes that ague or intermittent fever is due to these organic structures. Mr. Law, Professor of Veterinary Anatomy in the Cornell University, Ithaca, United States, in a letter to the writer, December, 1869, informed him that he had been much engaged of late in investigating the nature of an epidemic amongst cattle there, principally amongst those brought from Texas. The disease chiefly attacked cattle on low-lying and marshy districts, and he had discovered what he believed to be a fungus as the cause of the disease. We know from experiment that quinine checks and prevents the development of spores, and we likewise know, from the investigations of Dr. Bence Jones, that a substance resembling quinine is always in health present in the human body, and which is supposed to be "descended from albumen, and, doubtless, is an alkaline fluorescent substance of the utmost importance in the animal economy." May not its absence be a cause of the above-mentioned complaints? At the present time much thought is being bestowed on diseases of cattle; their correct study embraces also a knowledge of disease in human beings. If germs of fungi cause disease in the latter, it is likely they will do so also in animals.—Irish Farmers' Gazette.

Herpes Zoster of the Face and Tongue.—The following case is reported by Dr. C. J. Ermerins, of Amsterdam (Med. Tijdschr., 1 afd., p. 257, Mei, 1869; quoted in Schmidt's Jahrbücher, June, 1870, p. 277):—A woman, aged thirty-three years, suffered for two days from shooting pains in the right half of the face, at the end of which time there appeared on the right cheek red spots, which were soon succeeded by vesicles. At the same time the tongue swelled, deglutition became painful, and there was salivation. In two days the disease reached its acme; from the ascending ramus of the inferior maxilla to the ala nasi stretched a stripe of three fingers' breadth, upon which there were closely aggregated vesicles on a dusky red ground. They had become so confluent that the individual

groups were no longer distinguishable; they contained a sero-purulent fluid, and were in part ruptured and in part encrusted. The right half of the tongue was swollen, red, and covered with discrete herpetic vesicles of the ordinary size. Upon the right half of the soft palate were three groups of five or six vesicles each. The mucus membrane of the right cheek also was studded with vesicles, partly discrete and partly arranged in groups. The right sublingual and submaxillary glands were swollen. The lips were free from eruption. Two days later, incrustation was complete on the outside of the face, and after the falling off of the crusts, one week subsequently, only red spots were to be seen. Within the month no crusts were formed, but only erosions, which disappeared in four days. A moderate neuralgia persisted for a week after the completion of the process.—American Journal of Dermatology, No. IV.

Acne.—Willan defined acne to be "tubercular tumours slowly suppurating, chiefly common to the face." The disease is an inflammatory affection of the glandular apparatus of the skin, the seat of which is the sebaceous follicles. Authors describe four varieties—viz., acne simplex, punctata, indurata, and rosacea. The first three are merely stages of the same complaint: the last would be more correctly classed as an eczematous affection. In the latter affection the nose is the part attacked, the integument being often of a violet colour, covered with elevations that slowly suppurate. The affected skin is thickened and infiltrated. In chronic cases the alæ are pendulous, granulated, and liable to superficial ulceration; the cutaneous veins are also enlarged and varicose. Ordinary acne Hebra believes to be frequently due to an accumulation of sebaceous matter which gives rise to inflammation, that might be termed folliculitis. No doubt there is a determination of blood to the part, congestion of capillary vessels causing inflammation of sebaceous glands, which pustulate slowly, and are apt to re-inflame again and again. The causes of the disease are various; debility is a chief one, as also exposure to excessive heat, giving rise to erythema. The treatment of the ordinary varieties is simple: lotions containing sulphur or borax—the latter, as it leaves no roughness of the skin, is superior to the bichloride of mercury; or the hypochloride of sulphur ointment, introduced by Erasmus Wilson, may be used. Some authors recommend more heroic remedies, as treating each tubercle with acid nitrate of mercury. For internal use, salines, with iron and quinine, or, if flatulence is present, quinine, with either tincture of cardamoms or ammoniated tincture of valerian, may be prescribed. Mr. Wilson regards acne as an inflammation of the follicles associated with the development of the permanent hair at period of puberty.

IODOFORM DRESSINGS.—Iodoform, combined with cacao butter, has been used by M. Demarquay in the dressing of cancerous sores. In these cases it acts as a local anæsthetic and disinfectant. Dr. Stiles Kennedy, of Newwark, Del., recommends iodoform as an addition to the ordinary plasters and ointments for syphilitic periostitis. An ointment containing from 30 to 60 grains of iodoform to an ounce of lard is a beneficial remedy to painful burns, sores, chancres, and boils, promoting rapid healing. In two cases of chancre the dry powder was applied with magical results.—Med. and Surg. Reporter.

GLYCERINE.—Dr. Hager is convinced that glycerine often determines, particularly in regions where the skin is thin and delicate, erythematous and other eruptions. Hager found in a glycerine which produced irritation oxalic and formic acids, and in some specimens, ammonia. Besides these impurities M. Schepky has verified, in glycerine reputed to be pure, the presence of nitric acid, fatty volatile acids, and alkalies; traces of chlorine, lime, and sulphuric acid sometimes exist in glycerine which has not been distilled—(Rev. de Thér. Med. Chir., No. 2, 1870.) M. Pérutz states that butyric acid can easily be detected by gently heating the glycerine with a little alcohol and strong sulphuric acid. If butyric acid be present, the pine-apple odour of butyric ether will be developed. According to Mr. J Watts, the foreign or Vienna glycerine is apt to contain chloride of calcium, as much as one gr. in $\frac{1}{3}$ iii. An old specimen of yellow glycerine in my possession, labelled "pure glycerine" gave a distinct precipitate with nitrate of silver, soluble in ammonia and a light cloudiness with oxalate of ammonium.

THE ACTION OF URINE ON THE TISSUES .- Professor G. Simon (Deutsche Klinik) has made experiments on this subject. He remarks that it has been a dogma in surgery, that urine, whatever may be its reaction, has a destructive action on tissues not protected by an epithelial covering. He injected subcutaneously in rabbits pure acid urine. It was absorbed without Operation wounds moistened with fresh urine any apparent bad effect. healed by primary intention. When ammonical urine was injected, even though it had been filtered, abscesses were formed, and the skin over them In view of these results, the gangrene which appears became gangrenous. so rapidly in cases of infiltration of urine, must be ascribed to the mechanical action of the fluid driven forcibly among the tissues, so as to tear or compress the blood-vessels. In plastic operations on the urinary or sexual organs therefore, it is unnecessary to leave a catheter in the bladder so long as the urine is acid, whilst such operations should not be performed, if possible, when the reaction is alkaline.

ULCERS.—I need only suggest what to every surgeon cannot but be obvious, namely, that rest alone, in a horizontal posture, with the application of linen spread with any mild unctuous substance, will generally be productive of a perfect cure. But in very few cases can that simple plan be adopted by persons whose unfortunate lot it is to endure these diseases, together with a train of others incident to their poverty. When a surgeon is consulted, he will find in frequent instances that something irritating has been applied to the wound; he will perceive the surrounding skin inflamed, and the discharge thin and feetid; the ulceration gradually extending; the limb much swollen, and suffering from its own weight. All these symptoms are accompanied with continual pain, which increases during the night, in consequence of the exercise of the preceding day. In this state most surgeons would deem it indispensable to foment and poultice the part: to this there may be no objection, but I have seldom found it requisite. The first grand measure is, to attack and subdue the irritation and pain, by giving from two to five grains of opium daily, and about one grain of calomel night and morning, or every night, according as the constitution requires. As soon as the tenderness is diminished, let the dry suture be applied in the following manner:-Having first defended the cicatrizing edges of the wound, and the surrounding inflamed and delicate integuments with a strip of lint or fine linen, spread with spermaceti ointment, palm-oil, or any such mild preparation, by placing it on each side, the length of the wound; then apply a piece of adhesive plaister, cut tapering, about an inch in width at the broad end and two-thirds of an inch at the narrow end, and from eight to ten inches in length; the broad ends first, on the sound and uninflamed skin, beyond the lint, on each side of the ulcer; then draw the narrow ends as tight as can be comfortably borne, so as to approximate as much as possible the edges of the wound. In doing this the strips of plaister will cross each other, and afford the strongest support to the wound and the parts surrounding it. Two or three pairs of these strips will of course be necessary to cover and support an extensive wound. Lastly, apply the bandage, which is the most important part of the operation. This should be done, so as to afford the due support without creating uneasiness.—Medical Gazette.

VARIOLA—Was not known in Japan up to the year 736. At that time a man from Chikusen was shipwrecked on the coast of Tartary, and, in spite of seemingly certain destruction, reached terra firma in safety. There he remained but a short time, soon finding a vessel that would take him back to his own country. But he had stayed long enough to carry with him a dread disease, variola, the seeds of which lay dormant in his system until he reached home, when he fell sick with it and became a centre of contagion to all around him. It spread from him over the island, and finally became a terror to the whole empire. The priests of Shintoo, which was the oldest established religion, used it as a powerful weapon to fight the entrance into Japan of a new faith, that of Buddha. They proclaimed that this plague, variola, had been sent upon the people by the gods, because all were leaving their old religion to embrace this new doctrine. It is a fact, carrying with itself golden hopes for the success of Christian missions amongst that nation, that not even the dread of so terrible a disease could stop the progress of Buddhism, a faith better than any up to that time embraced by the Japanese. They were ever a very religious people, and in all the changes they made in their forms of worship, never left an old creed except to adopt a better one. Improvement marked every revolution in their devotional history. So when variola spread they made Buddhism spread but the faster, and only endeavoured to limit the ravages of the loathsome disorder by isolating it. After a time they sent all new cases into the mountains, there to be nursed by the convalescents. Curious enough, in the year 1862, there was still an island, distant from Nagasaki some ninety miles, where never yet a case of variola had occurred. Vaccination has been practised in Japan for the last thirty years. It was introduced by the Dutch. The place selected by the natives for vaccinating is the inside of either nostril. -New York Medical Record.

Almond Paste for the Skin.—Mr. Beasley gives the following formula for making the paste:—Powered almonds 4 oz., white of egg 1 oz.; beat them well together to a smooth paste, with equal parts of spirits of wine and rosewater.

AQUA COSMETICA.—Almond emulsion 3 oz., rose-water 8 oz., powdered borax one drachm, and compound tincture of benzion two drachms.

Pernio, or Chilblains—Is an erythema arising in languid or strumous constitutions, chiefly from exposure to cold,—the latter acting by paralyzing the nervous supply of the part, and thus causing congestion in the affected locality,—a Dermatitis congelationis, as Hebra calls it. The inflammation may extend to the deeper structures of the corium—frequently to the cellular tissues beneath, but is primarily cutaneous. In chilblains, as in other forms of erythema, infiltration may take place. The attack is ushered in by a feeling of heat, and itching or tingling, combined with redness and swelling of the affected part. In some cases, vesicles make their appearance, accompanied by a weeping of serum, being a typical eczema of Willan; in other instances by fissures, when it takes on the character of eczema rimosum. When the disease passes this state, suppuration usually takes place, eventually ending in ulceration. Chilblains are most commonly observed on the fingers, toes, and ears-sometimes bullæ form, the affected part first assuming a dark red colour. Pellagra also exhibits a dusky erythema, said to be sometimes caused by exposure to the rays of the sun in Southern countries. Bad or insufficient food, hard work, and exposure, are the causes to which the occurrence of these two diseases have been attributed. Ergoted rye, when this is the exclusive article of diet, may occasion these affections, by producing contraction of the blood-vessels of the spinal cord and its membranes, leading to a diminution of nutrition. In Pellagra, there is numbness and formication complained of in the skin. M. Roussell has described this disease in his work. The brain and its membranes are found congested, -- and, according to Landouzy, the white substance of the spinal cord in the lumbar region is softened.

CUTANEOUS DIPHTHERIA.—Dr. Marshall, in a paper on "Diphtheria and its Treatment" (Glasgow Medical Journal for August, 1870), thus describes a case of cutaneous diphtheria, occurring in a very stout woman, aged 50:-"For many years a superficial sore had existed about the centre of her right leg, constantly discharging. One day she had a shivering fit, the leg became painful, and when I saw it three days later, was inflamed from the toes to the knee, swollen, and tender to the touch, but not very painful when left alone, and with enormous blisters here and there over it. had a severe cough, but otherwise was not suffering constitutionally. Pulse was unaffected, tongue slightly coated, and the appetite deficient—(I may here mention shortly, that throughout the illness the constitution did not sympathize with the disease, which remained entirely local.) At first I imagined it to be a severe case of erysipelas, and treated it as such; but was struck with its peculiar colour, so different from the ordinary bright scarlet of that disease,—it was an intense dark violet crimson, something quite peculiar. Next day the blisters were almost continuous, two days later they had burst, and the leg from the knee downwards was covered with a diphtheritic exudation, exactly resembling chamois leather. Beyond the upper and lower margins of the exudation, which ended in a sharp line, the skin for about an inch and a-half maintained throughout the illness its intense peculiar angry red colour. The exudation could in places be lifted off, revealing below a raw, bleeding surface. A few hours sufficed for the exudation to be reproduced. It gave off an extremely fætid odour. I prescribed tincture of the muriate of iron in fifteen-drop doses every four

hours, and applied a lotion containing carbolic acid, glycerine, and water (strength, 1 to 40). This treatment was continued for a week without any beneficial result. The lotion causing a good deal of smarting, I substituted for it carron-oil, with a few drops of carbolic acid added, the odour being still very disagreeable,—first, however, applying a solution of nitrate of silver (20 grains to the ounce of water) all over the exudation. Four days later the swelling was slightly diminished, but there was no other improvement. She had been regularly taking the tincture of the muriate of iron up to this time; but, feeling that it must be hopeless to attempt to cure the disease by this means, I omitted it and substituted quinine, to try to improve the appetite, I now rubbed over the exudation, in one part, with solid sulphate of copper; in another, with a strong solution of nitrate of silver (40 grains to the ounce); and in a third, with carbolic acid and glycerine in equal parts. These were repeated every day in the same places for three days. They failed entirely to do any good that I could discover. Hydro-chloric acid and water in equal parts was applied to another part. This also failed. I now thought that the reason why these caustics did no good was that the thick exudation formed a protective coating to the raw surface underneath, preventing their acting effectively on it. I therefore endeavoured to dissolve off the exudation first, by applying in one spot a strong solution of bicarbonate of soda; in another, a saturated solution of hyposulphite of soda; and in a third, equal parts of liquor potassæ and water. They had no effect whatever on the exudation; certainly none that could give rise to any hope that they might thus be useful in the throat affection. Failing to obtain any solvent action by chemical means, I next thoroughly rubbed off the exudation in a part to which nothing had yet been applied, coming down on the raw excoriated surface; to a part of this I applied solid nitrate of silver, and to the other part the same salt in solution (3i. to the 3i.) Next day the membrane was reproduced. I rubbed it off, and applied the caustics, and again next day it was reproduced. Again I rubbed it off and applied the caustics, and again next day it was reproduced. I then gave up all hope of doing good by local applications, and applied simple water dressing; but to my astonishment and delight, two or three days after, I found the membrane had spontaneously separated from this part—i. e., the part to which I had applied the caustic solid and in solution, after rubbing off the exudation,—and that it was rapidly healing. It healed completely in a couple of days, while all the rest of the leg was still covered by exudation. I continued the water dressing, and watched. It was some days before there was any improvement elsewhere, though the general state of the leg had been improving for some time, as evidenced by the diminished swelling and redness; the next part to get well was the part to which I had applied the strong solution of nitrate of silver without removing the false membrane, and this was well a considerable time before the parts to which any other caustic had been applied. The part to which the solid sulphate of copper had been applied was the last to get well, it continuing bad many days after the rest was healed. It is but fair, however, to state that the blue-stone had been applied to the worst part of the leg, just over and around the original sore. The case was nine weeks under treatment from first to last. Nowhere had there been anything like ulceration of the true skin."

PESTILENTIAL DISEASES OF ENGLAND.—It was in the Autumn of 1348, that England was visited by that contagion, which, in its wide and destructive progress, does not fall short of any in the history of mankind. It began in Tartary in the year 1345, and continued to plague the earth for above seven years. After having spread through the various kingdoms of Asia, it passed into Europe through the Levant, and devastated in turn every country and district into which this part of the world is divided. The kingdom of Naples lost above 350,000 of its inhabitants; Venice 100,000; Florence above 60,000; and Avignon, then the chief city of the papacy, was nearly depopulated. We have Guy de Cauliac's account of the disease as it existed in the latter place: he practised there during its prevalence; and his contemporaneous notes are of great value. It raged in Avignon, he says, for seven months, during the first two of which is presented an aspect considerably different from what it bore during the remainder of the time. It was attended, during its first period, with violent fever and profuse hæmorrhages, under which every one seized by it perished within three days. In the second period, the chief symptoms were, continued fever, carbuncles, and abscesses in the axilla and groin, and with these, the disease was, until near its extinction, almost as fatal as during the first two months; the mortal period, however, was now prolonged to five days. Twenty-four millions of people, it is calculated, were cut off within the papal jurisdiction; and in short, it is supposed, that by this plague, one-fourth (the greater number of authorities say one-third) of the population of the world was destroyed. But before we come to the description of the disease as it existed in England, we must notice the account which we have of it, as witnessed in the Eastern Empire by the imperial historian, John Catacuzenus. "It was," says he, "such an unconquerable evil, that neither any diet nor strength of body could resist it; for it pulled down all bodies alike, as well the strong as the weak; and those who were most diligently looked after perished, as well as those who wanted all things. The knowledge of the physicians was completely put to a stand; some patients, enduring a little, died the same day, some the same hour; but those that held out to the second or third day were first taken with an acute fever, and the distemper affecting the head, were rendered speechless and insensible to all that was done; and so dropped off, as it were, in a profound sleep. Others were not taken in the head, but in the lungs: these had an inflammation in their inwards, which created acute pain about the stomach, so that they sent up blood and a cadaverous stench from within. Their jaws and tongues were dried up with heat, and black and tainted with gore. Some had imposthumous ulcers and black blisters upon their arms and under their arm-pits: some in their cheeks and other parts of their body; and in others there arose black spots all over the person—in some more superficial and visible, in others deeper and more obscure. almost all died alike. The few who escaped, however, were no more touched with the mischief; for it never took any twice, so as to kill. There was no certain remedy; what was good for one, was to another in the same condition fatal." The royal writer then proceeds to give some account of the moral effects of the pestilence, between which and the account of the same effects given by Thucydides, in his inimitable history of the plague of Athens, we should be strongly tempted to draw a comparison, did our limits QQ

allow us to be so discursive. But to return to "this fiery scourge of God," and its invasion of England:-" About the 1st of August, 1348," says the learned and accurate Joshua Barnes, "it began in the seaport towns on the coasts of Dorsetshire, Devonshire, and Somersetshire, whence it ran up to Bristol,—so that the Gloucestershire men forbad all intercourse with the Bristolians. But this familiar fury wanted no medium to introduce it; for as the Scripture says of the pestilence, that it walketh in darkness, or invisibly, its progress not being to be found out; so, unexpectedly, and contrary to human precaution, this plague also walked, or rather flew, among the Gloucestershire men,—whence it went to Oxford, and about the 1st of Nov. it reached London, and finally spread itself all over England, scattering everywhere such ruin and desolation, that, of all sorts, hardly the tenth person was left alive."—We now come to notice a pestilence which was for a time supposed to be peculiar to this country—the Sweating Sickness,—or, as it was called by professional foreigners, the sudor Anglicus. It was introduced into England along with the army of the Earl of Richmond (afterwards Henry VII.), one of the most wretchedly appointed bodies of men ever enlisted under one banner. Some, however, have gone so far as to trace the disease through these troops to the Turks of the Levant, who contracted it at the siege of Rhodes. However this may be, it is certain that though it was not attended in this country with glandular tumours and carbuncles, like the true plague, yet it had evidently only undergone some non-essential modifications on its arrival amongst us. Dr. Mead instances its "excessive faintings and inquietudes, inward burnings, and critical sweat," as serving to identify it sufficiently with Levant plague; for these, he says, are "nowhere observed to have so much intensity as in true plague." Caius, who has particularly described the sickness, has fallen into some unaccountable exaggerations and errors, which lower him somewhat in our estimation; at all events, for the novelty's sake, as well as for the unquestionable eminence of his authority, we shall be pardoned if we quote the account of the disease with which Lord Bacon supplies us in his "Reign of Henry the Seventh:-"About this time (1485), in Autumn, towards the end of September, there began and reigned in the city, and other parts of the kingdom, a disease then new, which, of the accidents and manner thereof, they called the sweating sickness. This disease had a swift course, both in the sick body and in the time and period of the lasting thereof; for they that were taken with it, upon four-and-twenty hours escaping, were thought almost assured. And, as to the time of the malice and reign of the disease ere it ceased: it began about the 21st of September, and cleared up before the end of October. insomuch as it was no hindrance to the King's coronation, which was the last of October, nor (which was more) to the holding of Parliament, which began but seven days after. It was a pestilent fever, but, as it seems, not seated in the veins or humours; for there followed no carbuncle, no purple or livid spots, or the like,—the mass of the body being not tainted, only a malignant vapour flew to the heart and seized the vital spirits, which stirred nature to strive to send it forth by an extreme sweat. And it appeared, by experience, that this disease was rather a surprise of nature than obstinate to remedies, if it were in time looked into; for if the patient were kept in an equal temper, both for clothes, fire, and drink, moderately warm, with

temperate cordials, whereby nature's work were neither irritated by heat nor turned back by cold, he commonly recovered. But infinite persons died suddenly of it, before the manner of the cure and attendance was known. It was conceived not to be an epidemic disease, but to proceed from a malignity in the constitution of the air, gathered by the predispositions of seasons; and the speedy cessation declared as much."—His lordship is a little too curious and speculative touching the proximate cause of the disorder; but, upon the whole, we look upon his account of it as quite as good as any we possess. It is not true, maugre the authority of Caius, that the sweating sickness was a disease peculiar to the natives of England; not only did many foreigners die of it at different times in this country, but in 1529 we find that Germany and the Netherlands were visited by the true sudor Anglicus; it was this, too, that interrupted the celebrated conference, at Marpurgh, betwixt Luther and Zuinglius, concerning the Eucharist. Historians reckon four visits that it paid to England after its first introduction-in 1506, 1517, 1528, and in 1551; nor should we omit to mention, that no class of society seemed to be privileged to escape its ravages; it even invaded the court, and threatened royalty itself. In Lord Herbert of Cherbury's History of Henry VIII. we find the following curious passage:--" Shortly after (July 1517), the sweating sickness (called for the propriety by which it seized on the English nation chiefly, sudor Anglicus) did much infect the kingdom, being of that malignity as within the space of three hours it killed. caused the King to leave London, and adjourning three terms 1517, to remove Trinity term 1518 to Oxford, where yet it continued but one day, and was adjourned again to Westminster. Nevertheless divers knights, gentlemen, and officers in the King's court, died thereof; as the Lord Clinton, Lord Grey of Wilton, and others of quality; the vulgar sort so commonly perishing as in some towns to take away half the people, in others the third part." And at a subsequent page :-- "As the plague destroyed the French in Italy, the sweating sickness consumed very many in England, it seeming to be but the same contagion of the air, varied according to the clime. was first known in England in 1485, then 1506, then 1517, and now in 1528, when it so raged that it killed ordinarily in five or six hours space, -invading even the King's court, where not only Sir Francis Pointz, Sir W. Compton, and Mr. W. Cary (of the King's bed-chamber) died of it, but the King himself was not without danger." It had been generally supposed that the sudor Anglicus was extinct since the year 1551, but Dr. Mead was of a different opinion. The Dunkirk fever of September, 1713, was a complaint apparently similar. It was brought over by our soldiers from that place, where it seems to have existed as a modification of the plague. Certain it is, that at Dantzic, not long before, the plague had been prevalent, and had spread thence into several cities of the north. In England the chief symptoms which marked it, were headache and feverishness, which went off in profuse sweats after a day's confinement; in Dunkirk, it was attended, in addition, with discharges from both stomach and bowels. It happens unfortunately that we have no contemporary medical records of the first outbreak of the Sweating Sickness; we only know that it was imported with the new King (Henry VII.) and his ill-appointed troops, and that it raged for a time with the greatest fury. If we possessed such records, we should probably find that

the faculty were, as usual, not a little divided in opinion on the subject—the better-informed, and the more unprejudiced, looking upon the disease as it really was, new, contagious, and formidable-the crowd of quacks and medicasters, to show their superior intelligence, and that they were ignorant of nothing, maintaining the complaint to be by no means new, nor infectious, nor dangerons, in their estimation. But this was peculiarly the dark period in the medical history of Britain, preceding the dawn of a day of more enlightenment; the wars and political troubles had, for more than a century. repressed, if they did not totally extinguish, everything like ardour in the pursuit of professional knowledge. The clergy had abandoned nearly all connexion with medical practice, and the country was overrun with unlicensed empirics, who have left no traces of their existence except in the traditionary stories of their audacious impositions. Not through such. surely, could we expect to have any fair account of the facts attending the progress of this, or any other novel malady visiting the country. But the sweating sickness does not by any means afford the most striking example of the backwardness of our profession at this early period; the other disease. the French or Italian, as it was indifferently called, which broke out soon afterwards in England, as well as throughout Europe, affords the strongest negative testimony to the utter ignorance of our native practitioners. Here was a disease of a virulently contagious description, all at once seizing on numerous victims, resisting every mode of treatment then known; not confined to the poor, or those whose circumstances exposed them to more than ordinary hazard of infection, or who were destitute of the means of procuring advice, but exhibiting its rage, and exerting its baneful influence, over princes, cardinals, nobles of every rank, and ecclesiastics of both sexes, thus proving both its immitigable severity, and putting the novelty of its widespreading scourge beyond all doubt. We know not exactly, it is true, how the faculty in England acquitted themselves on this occasion; but, happily, we have ample testimony regarding the mode in which their contemporaries on the Continent behaved; and it may not be amiss to take a brief notice of the circumstances which then occurred: they so much resembled what has been lately passing under our own eyes, that in our thoughts on this subject we have sometimes, we own, confounded the identity of the Tomitanuses, the Peter Maynards, the Brasavoli, and the Petronii, with that of some of our own "eminent" contemporaries. There is a passage in the English historian of physic (Dr. Freind), where he treats of the origin of this "new plague," which may serve to characterize the proceedings of some of those worthy moderns to whom we allude: -- "In the earliest appearance of this distemper, as well as since, there were many who, not being used to think or reason any further than as the ancients showed them the way, took a great deal of pains to prove, that the disease was known both to the Greeks and Arabians, though but imperfectly described, and represented under different names. And here we have instances how the words of old authors may be wrested and perverted to serve the present purpose, and support a favourite opinion; for their method of arguing was to quote by scraps, to pick out one symptom out of one treatise, another out of a second, and so-on, till at last they dressed up such a disease as the ancients had not the least notion of;" and the same mode of reasoning, he goes on to tell us, was used by the same

people when the small-pox first made its appearance; and so, no doubt, it it will ever be, where the herd of would-be reasoners is made up of the halflearned and the whole-conceited, and where, upon the occurrence of any unforeseen emergency, the love of notoriety, of whatever stamp, overbears the natural respect which is due to the dignified simplicity of truth. But with regard to the proceedings of our "reasoners." The disputes that occurred concerning the new disease caused the physicians, we are informed, to lie under "very great ignominy and contempt;" and not without pretty good reason. It was not only violently contested by some, whether the malady in question came from the Indies or not-or whether it was not well known in every preceding age up to Moses and the Jewish patriarchs—whether it did not come on the wings of the wind-or from insects-or from earthy exhalations; but some denied that there was such a disease in existence at all. One man, among the writers de Morbo Gallico, favours us with a whole chapter on the important question—whether it be a distemper or no—previously to his arriving at what he should have begun with—the symptoms of the disease. Another insists upon its including within itself no less than 234 different combinations or species. And, by the way, after upwards of three centuries of experience, and great changes and modifications, from a variety of assignable causes, having occurred in the nature of the complaint, are we entirely free from the mists that so early obscured its features? after it has been calculated that above a thousand treatises have been learnedly written on the subject, is all controversy set aside? On this, however, we will take leave to exercise our discretion, of saying as little as possible, or rather of being silent altogether. At what period our island became first acquainted with the true plague, it is difficult to ascertain; but there is every reason to believe that it was not much later in visiting us than the sweating sickness, if we had it not here indeed, long before. We have already stated our conviction that this latter disease was the Levant plague in a modified condition, and it is distinctly recorded at what intervals it visited the country in its new form. In the intermediate periods, however, it is certain that there was another pestilence in the land; and this was probably the genuine bubonic plague. In the Flagellum Dei, a curious little old tract in the library of the British Museum, and for a reference to which we are indebted to Mr. Marshall, we find the following notices of calamities, drawn up in a tabular form; after mentioning the great pestilence of 1348-9, and how, thirteen years after, there was another great morality, by which the nobility greatly suffered, it then proceeds to record, that in Ann. Reg.:-

3 Rich. II. there was a desolating mortality in the North.

17-19 Edward IV innumerable people died.

1 Hen. VII. Sweating sickness.

15 Hen. VII. 30,000 died of the plague in London. (This was A.D. 1500.)

9 Hen. VIII. Sweating sickness, carrying off multitudes of every class.

13 Hen. VIII. Great mortality.

20 Hen. VIII. Sweating sickness over the whole realm.

33 Hen. VIII. Hot agues and fluxes.

36 Hen. VIII. Great plague.

5 Edw. VI. Sweating sickness very general.

6 Eliz. Plague, of which 21,500 died in London.

36 Eliz. Plague, of which 17,890 died, including the Lord Mayor and three aldermen.

1 James I. (A.D. 1603), plague, of which 30,578 died in London.

This brings us through the sixteenth century by a series of awful catastrophes probably unequalled in the annals of a similar period in any other country in the world. That the list, however, is rather under than exceeding the true state of the mortality, we have much reason to surmise; at all events, from what we find in Holinshed and other authorities, who treat of the latter years, we have every reason to put much faith in the simple table before us. Holinshed says, that in Ann. Reg. 19 Edw. IV. (1479), "there was great mortality and death by the pestilence not only in London, but in divers parts of the realme, which began in the latter ende of September, in the yeare last before passed, and continued all this yeare till the beginning of November, which was about fourteen monthes; in which space died innumerable of people in the said citie and elsewhere." And again, 15 Henry VII. (1500), "The next yeare after, there was a great plague, whereof men died in many places, verie sore; but specialle and most of all in the citie of London, where died in that year thirtie thousand." The plague, we may perceive, was now familiarly known in England; and London was seldom for ten years together exempt from some dreadful warning of its presence. Maitland distinctly mentions, that, for five-and-twenty years previous to the great fire, the metropolis was never wholly free from the disease: it would seem to us, however, that if he had said at least seventy-five for twenty-five, he would not have erred in excess. The bills of mortality were temporarily commenced in 1593, by the worthy fraternity of St. Nicholas; more regularly and permanently from 1603; and, from the year 1629, the worshipful company of Parish Clerks have not only supplied us with lists of the weekly number of burials in London, but with a report of the diseases and casualties which have proved fatal within their jurisdiction. We some time since, in noticing Mr. Rickman's abstract of the population returns, extracted a passage rather reflecting on the utility of the "Bills of Mortality" reports; but, perhaps, on more mature consideration, it were not advisable to condemn, in so wholesale a manner, those "short and simple annals," particularly in the lack of matter more trustworthy. The truth is, that if we deprive ourselves of the testimony of these contemporary, however imperfect, documents, we give up the only opportunity we have of instituting a comparative inquiry into the unhealthiness of certain periods, and there is nothing to rely upon, except the detached notices which are to be met with in the memoirs of individuals living about the particular periods in question.—But to return to the state of pestilence in England. The plague which raged in London in the year 1603, soon after the accession of James the First, is mentioned by several authorities as having been very dreadful. In the Memoirs of that Monarch and his times, by Miss Aikin, we are assured that fully 30,000 persons were cut off by it; and it may be worth noticing, as affording a ground of comparison between the religious feelings of that period and the present, that there was then proclaimed a weekly fast and humiliation, wherewith to avert the heavy judgments under which the people were labouring. Another fact, from the same source, is also worth attending to: and by the way, how lamentable is it to reflect that we are so often beholden to some such almost accidental hints of intelligence for some of the most important facts connected with the subject of English medical history! The plague of 1603 (as the work of Miss Aikin informs us) raged through all classes of the com-

munity, with little partiality for one set than another, during several months: and it was far from being confined to the lower orders, as the following extract from a contemporary letter will testify. Sir Thomas Edmonds writes to the Earl of Shrewsbury, and his letter is dated September 11th, in the vear above-mentioned:—" The court hath been so continually haunted with the sickness, by reason of the disorderly company that do follow us, as we are forced to remove from place to place, and do infect all places where we come. We are now going within a few days to Winchester, to seek a purer air there, and by reason that the Spanish Ambassador hath had one of his company lately dead of the plague at Oxford, his audience, which was appointed to have been given him here, is deferred till the King's coming to Winchester, which doth nothing please his greatness."—(Aikin's James I. p. 159, 160.) -The great plague years in the seventeenth century, after the one which has just been noticed, were 1625, 1636, and 1665: In these years, there is no reason to doubt but that, of the plague alone, there died in London (within the bills of mortality) 35,417, 10,400, and 68,596, respectively; and we have even sufficient authority for concluding that, in all London, there were cut off fully one-half as many more.—London Medical Gazette, vol. ix.

SYPHILIS OF THE NERVOUS SYSTEM.—Such is the title of a pamphlet by Dr. Keys, of New York. Cases of hemiplegia, epilepsy, &c., due to syphilis are recorded. With regard to paralysis and the theories in reference to its cause, our author writes as follows:-"Is it that the blood is poisoned by the virus, and the symptoms produced by that virus without any material change in the nerve tissue? This theory sounds more rational than some; but, if it were true, we ought to have these nervous phenomena occurring more frequently in those cases where there is every reason to suppose the quantity of that virus to be excessive, as in those severe malignant forms of syphilis where the late cutaneous symptoms appear during the first few months, and the patient seems saturated with the poison—the syphilide maligne précoce of French dermatologists -but this does not seem to be the case. Is it a chlorotic state of the blood, as has been advanced? majority of the patients with syphilitic chlorosis are not affected with serious nervous symptoms. Shall we adopt the ingenious theory of Knorre, or that of Zeissl, that efflorescences on the pia mater may coincide with the earlier cutaneous lesions, and like them disappear after death, or that the pia mater is subject to an eruption like that which we see in syphilitic punctiforum iritis? These theories are by no means as simple or as easily accounted for as cerebral congestion, partial or general, and this it seems to me is probably often the cause of the paralyses sine materiâ. Of the autopsies, which I have been able to find, where no lesion was discovered, the majority of the patients had suffered from their nervous manifestations early in the general malady, before it was likely that serious organic lesions would have occurred, and when congestion was the general habit of the disease—as shown in the earlier exanthematic eruptions, especially roseola, which leaves no trace behind after death. The congestions which are sometimes seen on the conjunctiva in syphilis, sometimes preceding inflammation, sometimes subsiding without inflammation, form another support by analogy. A syphilitic congestion of the liver has been admitted by Gubler. In favour, also, of the probability of congestion of the brain

from the poison of syphilis, we have the analogy of the gouty poison and of urea in the blood producing a similar effect." Further on, regarding remedies, Dr. Keyes writes:-" The iodide of potassium has proved itself the remedy par excellence, and almost miraculous results are sometimes obtained by its administration in cases seemingly desperate. discover facts about the patient's previous history from his friends to make us believe syphilis the probable cause of the attack-such as the existence of mydriasis in one eye, perhaps long before, paralysis of some of the separate muscles of the eye, irritability of temper, hesitation in speech, loss of memory, inordinate emotional displays, or fixed pain at one spot upon the head for a long time before the attack; and if, added to a few of these symptoms, we learn that the attack, if it was hemiplegia, came on without loss of consciousness, or if it came on gradually, and we detect on examination some swellings on the bones, or old scars with a syphilitic aspect, or make out an enlarged liver, and, last but not least, if you press heavily upon the patient's head at the spot where he has been accustomed to complain of his pain, and cause him to wince and burst into tears, or to look up stupidly into your face and commence to laugh in an idiotic way, with these symptoms, I say, or even a few of them present in a given case, I think the diagnosis of syphilis is justifiable, and that the administration of iodide of potassium should be commenced at once in a large dose by the mouth or anus, and steadily and rapidly carried up to toleration. Again, five-grain doses of iodide of potassium may, exceptionally, produce violent symptoms of iodism, while an ounce a day may only give rise to an acne. The iodide of potassium should always be given largely diluted with water, and never, if it can be avoided, upon an entirely empty stomach.

LITERARY CURIOSITIES .- An ingenious contributor to our valued contemporary, the "Révue Médicale," has endeavoured to lay down and illustrate certain rules or maxims to be followed by those who are much engaged in mental occupations. Among other topics which he has introduced, he alludes to the very different habits of different authors, when occupied in composition. Montaigne shut himself up in an old tower "pour y digerer librement à loisir ses pensées." Rousseau herborized; it was, he used to say, "en se meublant la tete de foin," that he could think most profoundly. Montesquieu composed the groundwork of the "Esprit des Lois," while reclining in a post-chaise. Milton generally composed at night, sitting in his arm-chair, with his head resting on the back of it. Bossuet sat in a cold room, but kept his head warm with a quantity of coverings. Mr. Fox, after having indulged to excess in the pleasures of the table, would often, when he went home, retire to his study, and wrapping a cloth dipped in vinegar and cold water round his temples, sit engaged in study for ten hours successively. On the other hand, we are told that Schiller wrote most of his best pieces when he had his feet immersed in ice-cold water. Maturin, the author of Bertram, Melmoth, &c., withdrew into the most retired privacy when engaged in composition; when the inspiration seized him, he used to place a wafer between his eye-brows, to announce to his servants that they were not to disturb him. Jeremy Bentham was in the habit of writing all his ideas on small scraps of paper, and then stringing these together, so that they resembled rather a huge file of a merchant's

bills, than the manuscript of an author's work. Napoleon, we are told by Bourrienne, when engaged in deep thought, would often be humming or singing a tune all the time, or notching the arm of his chair with the "air d'un grand enfant;" then suddenly he would start up, and point out the design of a monument to be built, or explain some of those mighty projects which used to astonish and terror-strike the world. These, from out an almost infinite number of examples, sufficiently prove how different in different men are the circumstances favourable to mental labour. No general rule can be laid down; and the only advice to be suggested is, that each must work according to his fancy, habits, and ease. What has been said of literary composers holds equally true of their musical brethren. Some, as Sarti, &c., can compose only in silence and gloom. Cimarosa delighted in noise and brilliancy. Sacchini found relief, and almost assistance to his ideas, if several kittens were playing in the room beside him; and Paesiello, in his fits of composition, used to bury himself under the bed-clothes, trying to banish from his memory all the rules and precepts of his art, and giving vent to his feelings in the exclamation, "Holy Mother, grant me the grace to make me forget that I am a musician."!! It is an observation as old as the hills, that great and enduring works can be achieved only by patience and tedious thought. Perfection in any accomplishment, says Girodet, "ne s'improvise jamais." And Antoine de la Salle used to remark of any one commencing a work of importance, "celui n'est que l'ecolier de celui qui le finit." Even Voltaire, who perhaps of all authors had the greatest facility of rapid composition, was well aware of the requisite labour which must be spent in frequently revising his work; writing to M. Dargental on the occasion of a tragedy which he had very quickly composed, he wittily says, "Ma tragedie est finie; mais vous sentez bien qu'elle n'est pas faite. Mon ours de six jours demande six mois à etre leché." But the tedious labour of long-continued and of often-repeated thought, is by no means the attribute of the authors of the present times; men of science, as well as men of literature, are in a mighty haste after fame and glory, and there is many an "esprit genereux," who, like Champollion, is feeding himself with the hope of leaving "sa carte de visite chez la posterité." Our ingenious contemporary concludes his amusing paper with some sensible remarks on what may be termed the "adjuvantia" of mental labour: having alluded to the advantages of an airy, cool, and quiet study, he then, en passant, suggests the propriety of wearing large, wide, and convenient articles of dress (every one knows "les Regrets à ma vielle Robe de Chambre," one of Diderot's best pieces), and points out the injurious effects of stooping too much, or for a great length of time, at a low table, when engaged in writing. It is well (says he) to rise from the table frequently to walk about the room, read aloud, and occasionally to vary the subject of meditation by one of a less grave character. These precepts, although seemingly trifling, are not so in reality. "An atom makes a shadow," was an observation of Pythagoras; and there is as much physiological as mere physical truth in the observation; the slightest organic lesion, the smallest injury, the least perceptible disturbance of health, may become, if neglected, the parent of much serious mischief .- "Révue Médicale, and Med.-Chir. Review." RR

Weight of Brains.—In the Journal of Medical Science there is an elaboborate paper by Dr. Shuman on the "Weight of the Human Brain," and he gives the following interesting table of the brain-weight of seventeen distinguished men:—

\mathbf{A}_{i}	ge.	Oz.
1. Cuvier, naturalist,	63	64.5
2. Abercrombie, physician,	64	63
3. Spurzheim, physician,	56	55.06
4. Dirichlet, mathematician,	54	53.6
5. De Morny, statesman and courtier, 5.	50	53.6
A second a second as a second	70	53.5
7. Campbell, Lord Chancellor, 8	30	53.5
8. Chalmers, celebrated preacher, 6	67	53
	52	52.9
10. Gauss, mathematician, 7	78	52.6
	58	50.7
12. Whewell, philosopher,	11	49
The same of the sa	51 .	47.7
	30	44.2
	7 4	43.2
# A + FD1 7 17	_	52
17. Sir J. Simpson, physician,	{	54
Averages of ten distinguished men, 50-7	0 8	54.7
Averages of fifteen distinguished men, 50-8	0	52.7

The average brain weight, between the ages of 20 and 60, of Scotchmen, is given by Dr. Peacock at 50 ounces.

The Internal Administration of Carbolic Acid in Pruritus and Prurigo.—Professor Binz agrees with Hebra that pruritus and prurigo may be relieved by the internal administration of carbolic acid. The subject was lately discussed at Bonn, and a report given in the Berliner Klinische Wochenschrift. We should think the sulpho-carbolates, as given by Dr. Sansom, might be tried. We gave in our last number an epitome of Dr. Sansom's investigations, which have been detailed more fully in his paper read before the Medico-Chirurgical Society, and published in vol. lii. of their "Transactions"; and also in his paper read before the British Medical Association at the last annual meeting, and published in a recent number of the journal.—The Doctor.

In twelve severe cases of scarlet fever, complicated with diphtheria, the cold-water bath was employed whenever the temperature of the child reached from 38.5° C. to 39.5° C. The temperature of the bath was 25° C., and the time of immersion varied from eight to ten minutes, the bath being repeated, in some cases, every hour. Of these cases five died, while seven recovered; while in no case did dropsy supervene. Cases of scarlatinous dropsy were treated according to Liebermeister's suggestion, by warm baths, the temperature of which was gradually raised from 38° to 40° C. The child was kept in the bath half-an-hour, and copious diaphoresis kept up for two hours. The result was very satisfactory, the transudation being gradually and progressively absorbed without other medication.—Jahrb für Kindersheilkunde.

QUIDDAM HONORARIUM.—In looking over a volume of the Welcome Guest, we came upon the following remarks which, to our mind, are appropriate:-We should be sorry to see abolished the system of honorary fees. In Egypt, physicians are paid by government, which considers that the professors of such a noble art should not be exposed to the chance or caprice of the world for obtaining a livelihood. An eminent Italian writer describes a great physician as "the first of men; by the great improvements with which he perfects the art of healing he becomes the benefactor of humanity, and, by the empire he exercises over death, he is, in some degree, the image of the Divinity on earth." Such men are not to be requited like a tailor or a shoemaker. How is it possible for a person to compensate by a money payment the man that has rescued him from the jaws of death?—to set a pecuniary value upon life? The most he can do will be to give the physician some recompense for the time he has spent by his bedside,—for the hours of rest he has been deprived of. Something towards the outlay for an expensive profession, and the loss arising from the neglect of other patients, may also be given him. But the careful solicitude he has shown for your recovery. and the anxious watchfulness at the critical phase of the disease, when, perhaps, a visit wholly unlooked-for by the patient or his friends may happen at the nick of time, and be the means of saving life—how can this be valued and paid for in money? A medical man of eminence, some years ago, was called to the bedside of a tradesman suddenly stricken down by sickness. He soon discovered that his patient suffered from extreme mental disturbance, caused by dread of being unable to meet his engagements. He called for pen and paper, wrote out a prescription, and, when going away, left it on the table, with directions to the patient's wife to attend to it immediately. On taking it in her hand, she found it to be a cheque for £1,000. Her husband quickly recovered. The young surgeon who remained on the bloody hill-side at the Alma, to tend the wounded alone, in the midst of friends and foes, with the report of fire-arms, discharged by frantic wretches at each other in their agony, ringing continually in his ears as he pursued his solitary round, no one on earth now can recompense; but had he outlived his perilous though voluntary task, what pecuniary reward would have been an equivalent? Yet it must not be supposed that patients are always ungrateful. In the Code Napoléon, it is expressly laid down that death-bed gifts to medical men are null and void. The son of Æsculapius, the founder of the healing art, having been called in to attend the daughter of the King of Dalmatia, who was suffering from a severe fall, was so fortunate as to restore his precious patient to health. Her father, the king, moved by gratitude for her recovery, presented her to him as his bride, having first endowed her with a portion of his kingdom. But what shall we say of that celebrated danseuse, who, when restored to health after a dangerous illness, tendered her medical man six lessons in dancing, as a sufficient requital for his skill and assiduity? Or of that noble lord and member of the English government, who made an agreement with Hawkins, the surgeon so celebrated for his improvements in the art of lithotomy, to give him one thousand guineas, on his effecting a cure, but felt no shame in repudiating his promise when restored to health? A reference, however, to a jury of his peers adjudged him to pay it, and he did so. It seems that at

the time this skilful surgeon was applied to by his distinguished patient, he had performed the operation with success on several obscure persons, but dreaded a failure in such a conspicuous instance as a member of the House of Lords, as also of the government. He considered, and justly, that an unsuccessful termination would probably blast his professional prospects; that beggary would stare him in the face; and wished, by the amount of the fee, to provide himself with some indemnity. His patient, on the other hand, argued that a person suffering such agony as he did would promise his whole fortune—all the world—to those who could rid him of the disease, but that he could not be held morally or legally bound to any such unreasonable compact.

"Not helping death, my fee; But if I help, what do you promise me?"

Medical men are, however, in England, generally pretty well able to take care of themselves. They usually expect each visit to be duly accounted for before granting another. It is not exactly so in France. A French physician, called Dumoulin, obtained the character of being very mercenary, from a wish he showed to introduce English etiquette on the subject. When asked by his patients, as he was going away, would he make them another visit, he usually replied—"Yes, if you pay me." "Must we pay you now?" "Yes, if you wish to see me again." So inveterate was his rule in this respect, that the very poorest people had to humour him; but, for the honour of the profession, I am happy to be able to add, that the fee was frequently returned fourfold. The gains of London medical men are a great object of envy to their Parisian brethren; but I believe the disproportion is more apparent than real. For a guinea, you can make two visits to almost any of our most eminent surgeons or physicians, and ten francs is the recognized fee of a French Æsculapius of celebrity for one visit. The absence of a medical police is also a very disturbing element in the profits of the healing art in England, our quacks intercepting a large number of patients who would otherwise find their way into the hands of the more legitimate practitioners. There is a peculiar species of honorarium, against the seductions of which French students are frequently put on their guard by their more experienced brethren. "My dear sir," the head of a family will sometimes say to a young doctor that pleases him, "I entertain too great a regard for you, that I should never see you except when I am sick; pray look on yourself as a member of my family; be my friend as well as my doctor; there will be always a place left vacant for you at my table; you can retire when you please, if business calls you." Should the young Æsculapius take him at his word, and become a habitué of his hospitable table, the conversation will be of the father, the mother, the children, the grandmother, the cousins, the domestics, their country friends; they will praise his skill, his good nature, but they will never speak to him of money; and, should he demand it, they will prevaricate, and finally fall out with him. Some people fear to offend their medical attendant, when they have been on terms of social intimacy with him, by offering him money but will make him presents. I once knew a gentleman who had received, in the course of the year, half-a-dozen gold snuff-boxes, and three or four silver cups, but who found the greatest difficulty in meeting the calls of his different

tradesmen, tax-collector, &c. Professional men are, however, to be found, quite as greedy and unprincipled in their dealings as in any other branch of the social fabric. When Ibrahim Pasha was in the South of France, having met with a severe attack of illness, he gave as much as £4,000 to M. Tallemand for attending him. The latter, however, took his fee with a discontented air, which, being reported to Ibrahim, caused him to send an additional £2,000. This had the effect of drawing a smile from the doctor, but also deprived a relative of his of a situation, which had been promised him in Egypt. However, out of the frying-pan into the fire; for Ibrahim next employed M. Roger, of Paris, a dentist, to make him four teeth. For these he gave £240; but neglecting to take a receipt,—or, rather, letting a receipt in part payment be passed on him for a receipt in full, he was subjected shortly afterwards to a claim for £360 additional. On this, Ibrahim declared that to spend so much money on his mouth was literally to eat up his fortune, and declined paying. However, on Roger threatening law proceedings, he made a compromise, by giving him £120. California would seem to be the El Dorado of medical men, judging by the following scale of fees lately established at San Francisco:—A single visit, £4; ditto, at night, £10. Consultation, £25. An opinion, involving a question of law, Certificate as to state of health, £10. Vaccination fee, £8. Midwifery, up to £600. And so-on in other cases of illness, which are specified in the greatest minuteness, with the amount to be charged in each instance. In the island of Sardinia, on the other hand, the profession seems to have reached its lowest depth. There was a code of fees established there in 1841, of which the following is a sample:—A simple visit, 9d; if by a surgeon, only 6d. Bleeding in the arm, 2½d; in the foot, $4\frac{1}{2}d$; in the hand 3d. Extracting a tooth, $2\frac{1}{4}d$; ditto the root of one, $4\frac{1}{2}d$. However, we must bear in mind that provisions are very cheap in the island, the ordinary price of a lamb being about 1s 3d.—Lawyers, the other branch of the social fabric, who, by certain honoraria, not recoverable by Act of Parliament, gain incomes often princely, are, however, not generally considered subject to any of the more tender emotions on behalf of their clients, or excited by any feelings of the nobleness of their profession. Certainly, although the incomes of successful medical men, and that of eminent lawyers, are not so widely different, we find many instances of the former dying in straitened circumstances; but, of the latter, none strike my memory just now, as carried away by the strength of their passions, either for social enjoyment, the mania of gaming, or other vice, to have squandered their earnings, made, literally, by the sweat of their brow, save the great Lord Chancellor Bacon, and a late rather notable instance. There are not, however, wanting cases of considerable disinterestedness on the part of lawyers. Of these, I may mention that of Lord Mansfield. When plain Mr. Murray, the celebrated Sarah, Duchess of Marlborough, sent him a retainer of a thousand guineas. He returned nine hundred and ninety-five, with an intimation that his fee could neither be more nor less than five guineas. The manner in which she essayed to introduce herself to the celebrated lawyer is so characteristic, that I cannot do better than close this article by giving an account of it. One night, when he was indulging in agreeable conversation with Pope and Bolingbroke, she called at his

chambers, sat down in his arm-chair, and having in vain expected him home till past midnight, went away without seeing him. On his return, the clerk mentioned to him the strange visitor that had been with him, but declared that he could not say who she was, for she would not tell him her name; but he added, that she swore so dreadfully, she must be a lady of quality.

Antimonial Variola—Chemical Vaccination Preservative against Spon-Taneous Small-pox and Animal Vaccination—(By Dr. Hoffmann).—Of all antimonial preparations, tartar-emetic is undoubtedly the best suited for inoculation. Under the influence of the vomiting, tartar-emetic produces agitation, considerable muscular relaxation, as well as great depression of the nervous system and the circulation. Injected into the veins in doses of one or two centigrams, it produces at first nausea and then vomiting, rarely purging. Inoculated in a dose of one or two centigrams it produces the same symptoms as when injected into the veins, but its action is more slowly manifested. It brings on exactly the premonitory symptoms of variola; such as violent pains in the back, especially over the kidneys, painful oppression in the epigastrium and vomiting, with fever. The papular eruption which first appears is exactly the same as that of variola, and the papules soon change into umbilicated pustules. When tartar-emetic is exhibited in centigram doses at intervals, nausea is produced, and subsequently depression of spirits, a small soft pulse, and considerable muscular prostration, which was formerly taken advantage of in surgery for the reduction of dislocations. These are the same symptoms which appear in variolous patients at the commencement of the attack. There is at first elevation of temperature, then weakness of the pulse, lastly increased cutaneous secretion. Applied externally, either in powder or in concentrated solution, tartar-emetic sets up inflammation in the skin. At first an eruption is developed which is commonly local, and affects only the region which has been chosen for operation. Sometimes, however, other organs are attacked, as the scrotum, the labia majora, or the hypogastric region. After 24 or 28 hours, scattered red points appear, which have their orgin in the cutaneous follicles, and exhibit, first a papular stage, then a vesiculo-pustular, with the characteristic central depression, which soon assumes a dark brown colour. Then comes the period of desiccation. The crust, when it falls off, leaves a stain, more or less red; and in time nothing remains but a white scar. The advantages of antimonial inoculation are (1)—That it can be effected at any time; (2)—That the lymph can be preserved like vaccine, if collected before it has became opaque; (3)—That arm-to-arm vaccination is facilitated; (4)—That it is easy to engraft the antimonial variola on the cow, and thus re-establish or renew the cow-pox. The medicinal form most convenient for the production of antimonial variola is the stibiated pommade of Autenrieth. Two or three frictions with this substance are made on the outer part of each arm; or two or three little discs of cerecloth sprinkled with tartar-emetic. Each plaster should be of the size of a 20-centime piece, and should be left applied until redness and active inflammation, often with a little fever, are produced. The aqueous solution of tartar-emetic is less convenient. It acts less powerfully, moreover, than the pommade or the plaster. According to Buckstein (Hufeland's

Journal, 1844), we can obtain, by inoculating lymph taken from the pustules of antimonial variola, pustules absolutely identical with those obtained from Jennerian vaccine. This antimonial vaccine, which we shall call "chemical" or "artificial" vaccine, affords the same protection against variola as the old prophylactic. Lichtensteir, a skilful observer, established this fact. He made his first experiment in 1836. Thirty-one vaccinations and re-vaccinations were performed with antimonial vaccine, and all gave the most satisfactory results. At that time an epedemic of variola was raging: and all who were inoculated with antimonial lymph escaped completely. In the course of variola such intercurrent affections as bronchitis, pneumonia, &c., are frequent. In this fact, again, may be seen the action of antimony, and the strong affinity which it possesses for the thoracic organs.—Journal des Connaissances Medicalés, and Madras Medical Journal.

Test for Blood.—Guaiacum is an old and well-known substance, used in medicine for various throat affections, as excessive secretion from mucous follicles, tonsillitis &c.; indeed, in the latter, a mixture containing the ammoniated tincture of guaiacum ziss, tincture of bark zi, chlorate of potass zii, honey q. s. and water to zviii; a tablespoonful, every 2 or 3 hours, very often cuts short an attack inside twelve hours; for syphilitic ulcerations of the throat, guaiacum mixture, with iodide of potassium, is frequently prescribed. We have used the ammoniated tineture in psoriasis, preparatory to a course of arsenic, as a diaphoretic. It is, however, as a test for blood that it has recently attracted attention. Mr. J. W. Moore, M.B. (Medical Press and Circular), gives a translation of a paper by Dr. Almen, from which the following is taken:—"The most delicate, simplest, and best and really practical test of the presence of blood in the urine is that mentioned by me at the meeting of Naturalists, Stockholm, 1865, viz., the guaiacum test which is readily carried out in the following way: - Tincture of guaiacum (a solution in spirit of guaiac resin) and ordinary turpentine in about equal parts, or from half to one cubic centimetre of each, are blended into an emulsion in a test-tube, after which, a small quantity of urine is added in such a way as to sink to the bottom in a separate layer. Whether the urine is normal or unhealthy-for example, containing albumen, but no blood-the emulsion undergoes no change until a rather long interval, but if the least blood is present in the urine, or if a drop of blood be added to it, the emulsion immediately on mixing with the urine becomes of a light-blue colour, then darker, and finally the blue resembles a solution of indigo or Prussian blue, these changes varying in rapidity and intensity, according to the quantity of blood present. Many years' employment of this simple test has convinced me of not only its incredible delicacy, but also of its reliability. Neither normal nor ordinary albuminous urine, if free from blood, changes the guaiaco-turpentine emulsion at all in such a way that any doubt or uncertainty can arise as to whether blood is present or not; and this test for blood is for clinical purposes (not for medico-legal) simpler and far better than all others.

THE CAUCASIAN AND AFRICAN RACES.—Harvey L. Byrd, M.D., Professor of Obstetrics in Washington University of Baltimore (*Balt. Medical Journ.*), asserts that the negro requires more carbon for the well-being of his organism, and far less oxygen, at least during sleep, than the white man.

ULCERATION OF THE SKIN PRODUCED BY THE CONTINUED USE OF Bromides.—In the American Journal of Medical Science for October, is published a paper recently read by S. Weir Mitchell before the College of Physicians of Philadelpha, showing the effect of Bromides when continued for some time in full doses to produce ulceration of the skin. tion has a strong tendency to collect pus and epithelia in the form of a conical covering, causing it to closely resemble rupia. Indeed, in one case he cites, it was considered by the physician to whom it was first shown, to be of syphilitic origin. These ulcers were formed by an enlargement of boils that began to trouble the patient soon after the administration, though they did not extend to such a degree as to prevent further use of the remedy till nine months from its first administration. He tried all the preparations of Bromine, and in all the ways that it could well be administered, but, when long continued in full doses, all alike caused these hideous boils and ulcers. Though he has, in ordinary practice, met with but two cases of such ulceration, he has met many cases where the agent produced such eruptions of small boils as to make it advisable to withhold or lessen the dose of the drug. -Michigan Medical Journal.

Starch, Glycerine, and Carbolic Acid—Is an excellent preparation for healing ulcers, and for promoting healthy granulations on wounded surfaces. It is made by heating the glycerine to a boiling temperature, then adding the starch in fine powder, slowly—stirring the mixture for a few minutes, or until it is brought to the consistency of a soft paste. Then allow it to cool, after which then add a small quantity of carbolic acid, and mix thoroughly—North-Western Med. and Surg. Journ.

SMALL-POX WITHOUT ERUPTION.—An epidemic of small-pox broke out this Summer at a place called Limite, near Empoli (Italy). In publishing an account of this epidemic, Dr. Landucci states that several persons presented all the symptoms of the complaint, but had no eruption. Dr. Anciaux, in L'Art Médicale, corroborates the cases, and says that he witnessed the same peculiarity whilst the small-pox was prevalent in his locality.

Browide of Sodium.—The advantages claimed for bromide sodium over the bromides of potassium and ammonium are:—The taste, when perfectly pure and free from iodine, is almost identical with that of common salt, which being familiar to all and disagreeable to few, will recommend it to patients to whom the taste of the other bromine combinations are specially unpleasant. Having soda as its akaline base, it is more readily absorbed into the system—more quickly assimilated, and consequently acts more directly upon the animal economy than any salt of potassa can do. Neither have they found the same tendency to produce redness of the skin, external irritation and eruption. This bromide, weight for weight, contains about eleven per cent. more bromine than the bromide potassium—a fact which should be borne in mind it its application. So similar is it in taste to common salt, that it may be given in the patient's food, in flavouring soup, &c., without detection.

A Burning Earth.—A curious industrial application of a hydro-carbon called ozokerit, found as a mineral product in Moldavia and Wallachia, has been made in England. A firm, noticing its brilliant light when burned, decided to experiment on it, with the object of making candles. To all

appearances this was a most unpromising idea. The ozokerit, in its natural state, is a dirty, brownish-black mass, and the public have been so luxuriously educated in the matter of illumination that nothing but a very handsome candle can compete with the lights of the present day. The success of the enterprise has, however, been perfect. By sundry processes of distillation and purification, a beautiful, white, hard, waxy substance is produced, handsomer than spermaceti, not so transparent as paraffine, but possessing a brilliant gloss, and melting at a temperature of 140° Fahr. This high melting point (paraffine being about 125° and stearine 130°) allows the employment of a larger wick, and this, combined with the naturally brilliant light of the ozokerit itself, makes the candles burn with a brightness exceeding that of any now in use.—Medical and Surgical Reporter.

A PECULIAR INFLAMMATION OF THE LOWER LIP.—Prof. R. Volkmann, of Halle (St. Louis Med. and Surgical Journal), observed five times a peculiar form of chronic inflammation of the lower lip—cheilitis glandularis apostematosa—concerning which he finds no account in literature. All the patients were adults. Three had been suffering from constitutional syphilis a short time before. Two were quite healthy, and assert never to have been syphilitic. The course of the cheilitis was similar in the five cases, though of different intensity. The lower lip gradually swelled, without much pain, and became hard and firm, so as to give the countenance a coarse, disagreeable expression. The mobility of the lip was much impaired; in one case lost. swelling extended through the thickness and breadth of the lower lip, and down to the union with the chin. In one case it affected the upper lip about the corners of the mouth. The skin was slightly reddened. In all cases the mucous glands of the lip were swelled to the size of hemp-seed or more, and could be felt through the mucous membrane in unusual numbers and extent as nodular masses. These excreting ducts were much dilated, some of them large enough to admit a fine probe. Pressure, which caused but little pain, would evacuate from them a turbid mucous or muco-purulent secretion. In three cases abscesses formed. In one case the mucous surface of the lower lip showed from 12 to 15 fistulous openings. In all cases an active catarrh of the mouth and fauces existed. Two cases were extremely obstinate, and left hospital with little improvement.

Pemphicus.—In some cases, we observe different elementary lesions occurring in the same person, but a certain predominant form is always present. Thus the large bullæ of pemphigus may have the smaller vesicles of herpes interspersed amongst them, rendering it difficult at first sight to ascertain the true nature of the disease. Pemphigus resembles urticaria, which latter, according to Hebra, not only in its acute, but even in its chronic form, sometimes presents the peculiarity, that, instead of wheals, bullæ are found at certain spots. He says:—"But no one need be astonished at this exceptional occurrence who bears in mind that wheals themselves result from the pouring out of serum, and that an increase in the quantity of fluid is all that is necessary to raise the cuticle over a wheale, and so form a bleb. That this was known to the older authors, is proved by the expressions—urticaria, vesiculosa, urticaria bullosa." In pemphigus, the capillaries are dilated; the temperature of the affected part is raised; pain, heat, and tendered.

sion are complained of,—an escape of fluid finally taking place, the cuticle being elevated in the form of bullæ. In August 1868, a boy, aged 12 years, was admitted at Belfast Hospital for Skin Diseases, who first suffered from urticaria, which gradually disappeared; labial herpes, and pemphigus of the lower extremities then ensued. Möers reports a case of herpes zoster bilateralis of the lower extremities, which occurred in a child fourteen months old. The vesicles did not dry up as is usual, but ran into bullæ, as in pemphigus. The child fully recovered in five weeks. The exciting cause of pemphigus may be from exposure to cold and wet,-pemphigus being often observed in barge and lighter-men, who are, from their occupation, frequently wet for hours, especially their lower extremities. In these individuals the eruption is often of a mixed character, if I may so express myself-viz., bullæ, and vesicles, and a considerable area of the skin being often covered by the eruption. Inveterate drinkers are occasionally attacked with pemphigus. Dr. Anstie, in his article on "Alcoholism," informs us that the congestion of various organs—as the lungs, liver, kidneys, &c., are partly due to altered chemical relations between the blood and tissues, "and partly to a paralytic action of the alcohol upon the vaso-motor nervous system. . . It is indeed doubtful whether the degenerative changes which result from prolonged alcoholic poisoning are not, in a great part, due to the direct chemical influence of alcohol upon the nervous tissues," leading to degenerative changes, from paralysis of the nerves which preside over nutrition. I shall adopt Neligan's division of pemphigus into acute and chronic; the former usually attacking young people,—the latter those past the prime of life. Hebra has described a case of urticaria, in which several of the pomphi passed into bullæ; and the difference between pemphigus and urticaria may be briefly said to consist in the fact, that, in the former affection, the ædema ends in serous exudation, which is more superficial, and not so deep, as in the latter. A variety has been called relapsing pemphigus, and is evidently syphilitic; but many consider that all forms of the disease arise from this cause, whilst others again deny that syphilis has anything whatever to say in the occurrence of pemphigus. M. Ricord states "that there is no distinctive sign serving to distinguish the syphilitic from non-syphilitic pemphigus, as is the case in other cutaneous affections." Cruveilhier have shown that this disease is often met with in new-born children who sink under syphilitic abscesses of the lungs. Acute pemphigus, as remarked by Sir D. Corrigan, M.D., is occasionally ushered in by a severe shivering fit, which might be mistaken at first for an attack of intermittent fever. An abstract of a paper on Pemphigus, by Dr. Van Dieren, taken from the Dutch Archives of Medical Science, will be found in the Dublin Quarterly Journal, Feb., 1869. The case recorded, occurred in the "form of intermittent fever,"-temperature of the body 104° F., pulse 120, tongue dry. The patient—a child—was raving when first seen, and had from time to time convulsive twitchings in the arms and legs, after which bullæ appeared. In pemphigus, about the third day, erythematous spots appear on the abdomen and thighs, or other parts, accompanied by a painful sensation of burning, tingling or itching. Vesicles usually appear on these patches, which rapidly pass into bullæ. The urine is high-coloured, appetite bad, and the patient complains of headache, - occasionally of sleepiness and exhaustion; the pulse is generally quickened. In about two or three days the bullæ break, scab, and crust,-this latter frequently representing the appearance of rupia. In rare cases, the bullæ become confluent; and, in one instance which I saw, the patient was covered with blebs in various stages, the discharge from which, owing to its containing albumen, stiffened the sheets like starch. In Pemphigus foliaceous, the brain and spinal cord are frequently affected, diarrhea carrying off the patient. The latter seems to be an affection of the vaso-motor nerves of the intestinal canal, as we may conjecture from the fact, that diarrhea is prevalent in hot weather, at which time the blood is freely determined to the cutaneous surface. This variety commences on the front of the chest by a single bulla, and by the development of others around it, and spreads over the whole surface, the bullæ being more or less imperfectly formed. The skin is red in many places, but there is not much infiltration, and itching is not severe. After the bullæ form, large yellowish squame are produced, with more or less desquamation;—the scales, which may be large, are the remains of imperfectly formed bullæ, and are free at their margins: they are reproduced very rapidly. The bullæ are successive and confluent. Oftentimes the skin exhales an offensive odour. The scales have been described as resembling French pastry.—On Neurotic Cutaneous Diseases. By H. S. Purdon, M.D. 1870.

INVESTIGATIONS AS TO THE CAUSE OF THE GREAT GRAVITY OF ANTHRAX AND FURUNCLES OF THE FACE.—The numbers of the Archives Générales de Médecine for June, July, and August last, contain an elaborate article on this subject, by J. L. Reveratin, Interne Lauréat des Hôpitaux. The following are his conclusions:—1. Anthrax and furuncle of the face are very grave affections. 2. This gravity is owing to their being prone to be complicated with phlebitis. 3. Facial phlebitis tends to a fatal termination, either by its extending to the sinus of the dura mater, or by becoming the source of purulent infection. 4. Anthrax in the lips is complicated more frequently than when situated in other parts of the face with phlebitis, which fact is to be accounted for by the particular structure of the lips. 5. Anthrax of the lips is entirely different from malignant pustule. 5. The extension of phlebitis to the orbit, shown by the presence of exophthalmia, shows almost positively that the sinus has become affected. 7. Incision, made as rapidly and as largely as possible, appears to be the best means of preventing and sometimes of arresting the complication of phlebitis.

Congenital Gangrene.—Dr. J. R. Bratton (Richmond & Louisville Med. Jour.) presents an interesting case of this disease, which came under his observation. A lady, about twenty-five years of age, was delivered, after a natural labour of three hours' duration, of a well-developed female child, healthy in all respects, except the left hand and forearm, which presents the following condition. Upon the palmar and dorsal aspect of the hand, as well as the flexor and extensor surfaces of the forearm, about its middle third, were patches of skin and subjacent cellular tissue, irregular in form, and about an inch or more in diameter, in a gangrenous condition. Those portions of the skin between the hand and those on the forearm were in an erysipelatous condition, as well as that portion of the integument extending

from the patches on the arm to the middle third of the humerus. The child was applied to a healthy wet-nurse, and glycerine and carbolic acid lotion applied to the gangrenous surfaces. In a few days the dark livid surfaces cleaned off, leaving healthy granulating surfaces beneath. In course of time the surface was entirely healed.

Correspondence.

VACCINATION AND SANITATION.

TO THE EDITOR OF JOURNAL OF CUTANEOUS MEDICINE.

SIR,—As the Lancet declares that these are times of "scepticism as to the value of vaccination," it may be well to consider why it is that any scepticism exists respecting an agent which has had 70 years' fair trial, and has enjoyed during the whole of that time the "reverberated encomiums" of well-paid officials. Even now, some papers which claim to be the especial champions of medical liberty, do not scruple to make an exception, when they come to treat of vaccination; and we accordingly find the Monthly Homeopathic Review for February distinctly advocating the vaccination and re-vaccination of "every child born in the land." Of course, the journal in question is aware that not less than 100,000 families have made up their minds to have nothing to do with the operation in question; and therefore the plan can only be carried out by the greatest infringement of public liberty ever known in this favoured empire. God has given to every parent authority to decide upon the medical treatment of his offspring; and when Parliament vainly endeavours to override the ordinance of God, we may well ask-By what authority doest thou these things? and-Who gave thee that authority?

The whole history of the establishment of vaccination in this country shows a series of protests, from well-educated medical men, against the universal employment of a prophylactic which requires such an amount of care and skill to produce good, and avoid bad results, that no government could honourably undertake to enforce it under a cost of several millions per annum, and hardly even then.

The object of vaccination is stated to be the annihilation of a particular form of zymotic disease, against which it affords nearly absolute protection.

Without endorsing the theory implied by the word "zymosis," the expression may, perhaps, still be employed with advantage, for the purpose of classification; and I shall only be in accordance with existing usage, if I employ it in connexion with certain infectious and contagious maladies which have been ascertained to infest most, those ill-drained, unventilated, and over-crowded dwellings, which still make the rich tremble for their neglect of the poor. It is only those who have never seen such places, who wonder at the existence of epidemics. Those who are acquainted with the former are rather inclined to wonder that the latter are not always present.

There has existed during the winter, in Liverpool, a fourfold epidemic, of measles, small-pox, typhus, and relapsing fever; and the description of the

places, or slums, where these fevers are manufactured, which has been given in the medical papers, is quite adequate to convince any candid mind that many of the tenements are unfit for human habitation, and that others are so overcrowded as to be always "centres of infection." I do not know whether I am at liberty to use the latter expression, as it has lately been consecrated by certain journals to signify unvaccinated infants. But I will avail myself of the doubt, as they have so many other phrases by which to indicate their idea of the imperfection of God's workmanship. Whatever may be the personal views of a writer in a paper which claims to have the largest circulation in the world, one would think he might have paused before he made himself ridiculous, by comparing a healthy infant to a "barrel of petroleum"!

Meantime, I permit myself to assert, that Liverpool always contains "centres of infection," and that London has certain districts which are a disgrace to the 19th century. According to the Lancet, "the persistence with which small-pox clings to the East end of London is very remarkable." The expression chosen here is accurate; for it is very worthy of remark, that out of the seventeen principal cities in England, three-fourths of the cases of small-pox occur in Liverpool and London; and a similar proportion of the number of cases in those great cities occur in localities such as I have alluded to. It can hardly, therefore, be correct to attribute the present epidemic altogether to neglect of vaccination, especially as the recent immigration from Paris must have imported, on a large scale, the seeds of the disease. Nor can it be correct to say that universal vaccination can "stamp out" a disease which is manufactured afresh every hour in the day, and every day of the year. This phrase, "stamp out," has had a great run of popularity. Some of the London papers have not yet done circulating the statement, that small-pox has been "stamped out" in Ireland; apparently being unaware that you have had an epidemic in Belfast, which still smoulders, and may break out again.

It is in the very nature of an epidemic to be sometimes absent; and it therefore is absurd to shout "stamped out," whenever it is in abeyance; and still more to say that this is owing to the excessive number of vaccinations in Ireland. On an average of four years, from 1866 to 1869 inclusive, we find the proportionate number vaccinated in the Three Kingdoms to be as follows:—

Scotland	• •	 	88.0
England	• •	 	65.5
Ireland		 	65.5

The number of vaccinations in Ireland is, therefore, less than in Scotland, and only the same as in England,—even supposing the registration of births to be as complete, which is very doubtful indeed.

These remarks are necessary, in order to clear the ground for a truthful estimate of the value of vaccination, as of prophylactic against a particular disease. I say a particular disease,—for many of those persons who say that a vast number of lives are annually saved to the country, must surely be aware, that, according to the Registrar-General's report, infant mortality has not been correspondingly diminished since the introduction of compulsory vaccination; indeed, excessive infant mortality still occupies

much public attention. Moreover, some time ago, when the boast was made that so many lives had been saved in Scotland, because there were no cases of small-pox, a reference to the register showed that the mortality of Scotland was the highest which had been recorded for a good many years. Whilst now that small-pox is present in London as a severe epidemic, it is reported in the Times, that the general mortality is about 10 per cent. less than the ordinary average—(viz., week ending 1st February). With such facts before us, it is evident that we cannot be justified in setting down diminished mortality from small-pox as necessarily so many lives saved to the country. On the other hand, I do not wish to undervalue the protection which good vaccination undoubtedly confers; although I think the discontinuance of inoculation has much to do with our present comparative immunity from small-pox. Vaccination does not confer absolute protection (however often it may be submitted to). It is not free from risk of infection with other diseases. It is a disease itself (though a slight one); but it does confer more or less immunity from small-pox, because it is a modification of the same disease. It would be like slaying the slain, to attempt to prove over again any of the above statements. They have all been established on the most irrefutable authority, and by the most extended experience; and I shall not, therefore, weary your readers by any elaborate statistics on the subject; but I feel bound to protest against persons, who have a pecuniary interest in extending the practice of vaccination, being allowed to keep up a perpetual agitation in the newspapers, by the insertion of paragraphs full of the most astounding exaggerations, and the most virulent abuse of all who differ from them in opinion upon an open scientific question. The result of this agitation is to prevent anything effectual from being done in the way of sanitary improvement, by using up the public monies, and forcing public attention in a wrong direction; whilst under the name of isolation and quarantine, the greatest inhumanity is practised towards those who unhappily contract the disease. Owing to the panic thus created, they wander about from hospital to hospital, being unable to find admission, until it shall please the authorities to open entirely new buildings for their reception: and this in the midst of a "protected" population. It is true that small-pox is a loathsome and destructive disease; but the public are well aware of this fact, and it does not take many articles in the daily papers to produce the greatest alarm. Yet, even during the panic, the rich will not knowingly use the lymph which is provided by government, and whose use is enforced by fines and imprisonment amongst the families of the poor. Here is the grand difficulty of compulsory vaccination. We cannot ensure purity of lymph. There is no test by which impurity can be recognised; nor can we guarantee skill in the performance of the operation; which the latest report of the small-pox and vaccination hospital declares to be one of "considerable

In consequence of the large proportion of vaccinated persons admitted into the Paris hospitals during the recent epidemic (about 96 per cent.), it has been asserted in this country that the necessary skill is wanting in France. If true, a very strong case against making the practice compulsory. But we must look to other causes to account for the Paris epidemic, and not confine our researches to the pages of medical journals. We have all heard

of Baron Hausman's improvements in the city; whole streets having been pulled down, including many of the habitations of the poor. But have we heard what became of those poor, when driven to seek for other lodgings? It is the old story! The tenements which still remained, and which were within their means, became terribly overcrowded,—and, as a natural consequence, a pestilence broke forth. We may see the same cause at work on a more extended scale throughout those districts over which the German hosts have passed,—devouring the food of the people, and burning down their dwellings.

Do we not see every kind of zymotic affection springing up, and notably small-pox amongst the rest? Nay, more: do we not see the same disease now prevalent in Brussels, where some time ago we were informed that vaccination was so completely carried out, and never performed in the careless way attributed to the French? We have surely now sufficient facts to enable us to assert, with the most profound conviction, that the only way to "stamp out" small-pox is to dry up its sources; and, if we honestly attempt this, we shall have a rich reward.

I believe that there are places in England and Wales (Merthyr-Tydvil, for example) where, in a single year, sanitary measures of the simplest kind have diminished the general mortality by one-half; and I feel well assured that, if the same amount of money which is now expended in *endeavouring* to make compulsory the practice of vaccination, were spent in building, draining, and ventilating the houses of the poor, we should not only all but banish small-pox, but also get rid of various other zymotic diseases (including scarlet fever, whose mortality is twelve times as great as that of small-pox), and very much diminish a host of minor affections!—I am, Sir, your obedient servant,

Edward Haughton, M.D.

80, Kensington Park Road, Notting Hill, London, 13th February, 1871.

[With regard to the epidemic of small-pox in Belfast, we are happy to state that it is rapidly disappearing,—which must, at least in a great measure, be attributed to the excellent suggestions contained in a circular issued by our local Board of Guardians, addressed to each mill, factory, foundry, warehouse, &c., where a number of people are employed, calling upon the employers to have their workers re-vaccinated,—which, to our personal knowledge, has been energetically performed.—Ed.]

Our friend, Dr. Duhring, Editor of the Photographic Review of Medicine and Surgery, has sent us the following letter, which we have headed—

DERMATOLOGICAL GOSSIP.

TO THE EDITOR OF JOURNAL OF CUTANEOUS MEDICINE.

Dear Sir,—Knowing the interest that you take in anything relating to the subject of Dermatology, I venture to send you (by the same mail) a few letters that have just appeared in one of our journals. I am very sorry not to have had the pleasure of meeting you in your home, but my stay in Ireland was so very short that it did not allow me time to visit your city.

I read your journal always with much pleasure, and am glad to see it prospering so nicely, and wish for it an uninterrupted life and success. If I can judge from the report of your Belfast Hospital for Skin Diseases, you must have a very fine clinique, and interesting cases of every description.

I am happy to inform you that we have just had organized and opened in Philadelphia an Institution for the exclusive treatment of Skin Diseases, and to which the trustees have appointed me physician. Our eminent surgeon, Professor S. D. Gross, is President; and the board consists of some of our own good citizens. As far as my knowledge extends, this is the first separate chartered Institution of the kind in our country (excepting the various departments for diseases of the skin connected with our hospitals and colleges). The name of the new charity is "Dispensary for Skin Diseases."

With many good wishes for the future of your Journal, as well as the Hospital for Skin Diseases, Belfast, I subscribe myself—Yours, most truly,

1226, Walnut Street, Philadelphia, 21st January, 1871. L. A. DUHRING.

Books Receibed.

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Syphilis of the Nervous System. By A. L. Keyes, M.D., &c. New York: Appleton & Co. 1870.

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THE MORE RECENT METHODS OF TREATING WOUNDS, &c. By Edward Lund, F.R.C.S. Manchester: J. Cornish.

LA METHODE Hypo-DERMIQUE DANS LA CURE DE LA SYPHILIS Par le Docteurs Scarenzio and Ricordi. Bruxelles: Manceaux. 1869.

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RECEPT FORMELN AUS DER WIENER KLINIK FUR SYPHILITISCHE Des Professor V. Sigmund. Wien: W. Brauuller.

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Notice to our Subscribers.

WE would beg to remind our subscribers that the present number completes our Fourth Volume; consequently, all subscriptions are now due. Those gentlemen who have not already forwarded the annual subscription for last year, are requested to do so.



